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SENDER'S DIRECT DIAL
(303) 256-3986

SENDER'S INTERNET ADDRESS
jsteeler@irwl.com

August 10, 2001

HAND DELIVER

Ms. Dawn Tesorero
Technical Enforcement Program
U.S. Environmental Protection Agency
999 18th Street, Suite 300
Denver, CO 80202-2466

Re: First Request for Information Pursuant to § 104 of CERCLA for the Vasquez Boulevard/I-70 Site, Denver, Colorado

Dear Ms. Tesorero:

On behalf of Pepsi Bottling Group, the attached information is intended to supplement my client's preliminary response dated April 6, 2001; the response dated May 4, 2001; the supplemental response dated May 16, 2001; and the supplemental response dated June 21, 2001. Specifically, attached hereto as Attachment 1 is Exhibit 6.d-6 to the Response dated May 4, 2001. This Exhibit is responsive to Question 6 of the above-referenced information request. This Exhibit provides information relating to the construction in 1986 of a portion of my client's facilities known as the Sports Center. As we have discussed, a portion of this facility was recently demolished. Specifically, I have enclosed:

- ✓ 1. Compaction Test Reports for:
 - a. Athletic Center/Sports Facility ✓
 - b. Box Culvert Backfill ✓
 - c. Utility Trench Backfill
2. Structural Drawings for Sports Center
3. Plumbing Drawings for Sports Center

RECEIVED

AUG 13 2001

Office of Environmental
Compliance & Enforcement
Justice

ISAACSON, ROSENBAUM, WOODS & LEVY, P.C.

Ms. Dawn Tesorero
Technical Enforcement Program
U.S. Environmental Protection Agency
August 10, 2001
Page 2

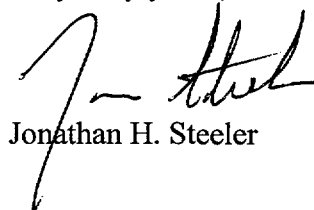
The foregoing material was specifically discussed with Marc Herman at a meeting at my client's facility on July 23, 2001.

Please be advised that the soil stockpile located on the property which was sampled earlier this summer and the results of which sampling were forwarded to you on June 21, 2001, is being removed the week of August 13, 2001.

Also be advised that my client plans to start the demolition and removal of the existing concrete slab and excavation of the excess dirt fill inside the Pepsi warehouse during the week of August 20, 2001. This work is taking place within the portions of the warehouse that were built in 1966 and 1971. It is the recollection of my client's project staff that there is approximately four feet of imported structural fill under the warehouse floor in this area. My client does not anticipate any excavation deeper than four feet for this phase of the project.

This letter is being submitted as a supplement to the previous responses. If you have any questions regarding the enclosure, the soils removal project, or need further information (including further certification), please advise the undersigned.

Very truly yours,



Jonathan H. Steeler

JHS:jkw
Enclosure
493861

cc: David H. Patrick, Esq.



CTL/THOMPSON, INC.
CONSULTING GEOTECHNICAL
AND MATERIALS ENGINEERS
1971 WEST 12TH AVE., DENVER, CO 80204
(303) 825-0777

CLIENT: PEPSI COLA COMPANY
3801 BRIGHTON BOULEVARD
DENVER, COLORADO 80216

DATE: 12-30-85 JOB NO. 12532
REPORT NO. 1 SHEET 1 OF 1
SUBJECT _____

PEPSI-COLA SPORTS FACILITY ADDITION
3801 BRIGHTON BLVD.
EXCAVATION INSPECTION

[illegible]

SPECIFICATIONS: _____ % OF MAXIMUM _____
 MOISTURE WITHIN _____ % OF OPTIMUM _____
 TYPE OF COMPACTION EQUIPMENT AND NO. OF UNITS: _____

MOISTURE ADDED BY _____
THICKNESS OF LIFT _____ INCHES
TYPE OF EARTH MOVING EQUIPMENT AND NO. OF UNITS: _____

THIS REPORT PRESENTS OPINIONS FORMED AS A RESULT OF OUR OBSERVATION OF FILL PLACEMENT, AS WELL AS THE TESTS SHOWN ABOVE. WE HAVE RELIED UPON THE CONTRACTOR TO APPLY THE NECESSARY COMPACTIVE EFFORT AND MOISTURE TO ACHIEVE SPECIFIED COMPACTION DURING TIMES WHEN OUR OBSERVER IS NOT PRESENT, AND AT LOCATIONS OTHER THAN THOSE TESTED. TEST DATA ARE NOT THE SOLE BASIS FOR OPINIONS ON WHETHER THE FILL MEETS SPECIFICATIONS.

PROGRESS REPORT AS REQUESTED BY DARREL WITH REID BURTON, OUR FIELD REPRESENTATIVE OBSERVED SOILS EXPOSED IN THE SOUTH WEST CORNER OF THE BASEMENT EXCAVATION FOR THE SPORTS FACILITY. SOILS EXPOSED IN THE TEST PIT CONSISTED OF A SAND-GRAVEL WITH WOOD AND BRICK DEBRIS TO A DEPTH OF 4 TO 5 FEET. NATURAL SAND AND GRAVELS WERE EXPOSED IN THE BOTTOM OF THE TEST PIT. DARREL WAS ADVISED TO REMOVE THE DEBRIS MATERIAL AND REPLACE WITH A COMPACTED STRUCTURAL FILL. DARREL REQUESTED WE RETURN WHEN THE TRASH FILL IS REMOVED. OUR FIELD REPRESENTATIVE OBSERVED SOILS EXPOSED IN THE EAST FOOTING EXCAVATION OF THE BASEMENT. SOILS EXPOSED CONSISTED OF A NATURAL SAND & GRAVEL.

☐ IN OUR OPINION, FILL COMPACTION MEETS SPECIFICATIONS AS INDICATED BY OUR OBSERVATIONS AND TEST NO.(S) _____

☐ IN OUR OPINION, FILL COMPACTION DOES NOT MEET SPECIFICATIONS AS INDICATED BY OUR OBSERVATIONS AND TEST NO.(S) _____

SCOPE OF OBSERVATION: ☒ FULL TIME; ☒ PERIODIC, ON CALL BASIS; ☐ CONTRACTOR'S OR CLIENT'S REPRESENTATIVE ADVISED **DARREL REID BURTON**

DELMAR FISCHER

CTL/THOMPSON INC.

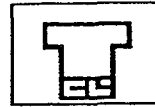
FIELD REPRESENTATIVE

APPROVED BY

RONALD M. MC OMBER, P.E.

DF:PV

Compaction Test Report



CTL/THOMPSON, INC.
CONSULTING GEOTECHNICAL
AND MATERIALS ENGINEERS

1971 WEST 12TH AVE., DENVER, CO 80204
(303) 825-0777

CLIENT: PEPSI COLA COMPANY
3801 BRIGHTON BOULEVARD
DENVER, COLORADO 80216

DATE: 12-31-85 JOB NO. 12532
REPORT NO. 2 SHEET 1 OF 1
SUBJECT

PEPSI-COLA SPORTS FACILITY ADDITION
3801 BRIGHTON BOULEVARD
EXCAVATION INSPECTION

TEST NO.	LOCATION	DEPTH FEET	TEST TYPE	LABORATORY		FIELD			SOIL TYPE
				MAX DENSITY PCF	OMC %	DRY DENSITY PCF	MC %	COMPACTION %	

SPECIFICATIONS: _____ % OF MAXIMUM
MOISTURE WITHIN _____ % OF OPTIMUM
TYPE OF COMPACTION EQUIPMENT AND NO. OF UNITS:

MOISTURE ADDED BY _____
THICKNESS OF LIFT _____ INCHES
TYPE OF EARTH MOVING EQUIPMENT AND NO. OF UNITS:

THIS REPORT PRESENTS OPINIONS FORMED AS A RESULT OF OUR OBSERVATION OF FILL PLACEMENT, AS WELL AS THE TESTS SHOWN ABOVE. WE HAVE RELIED UPON THE CONTRACTOR TO APPLY THE NECESSARY COMPACTION EFFORT AND MOISTURE TO ACHIEVE SPECIFIED COMPACTION DURING TIMES WHEN OUR OBSERVER IS NOT PRESENT, AND AT LOCATIONS OTHER THAN THOSE TESTED. TEST DATA ARE NOT THE SOLE BASIS FOR OPINIONS ON WHETHER THE FILL MEETS SPECIFICATIONS.

PROGRESS REPORT DURING THIS SITE VISIT THE CONTRACTOR REMOVED DEBRIS FILL MATERIAL FROM THE SOUTHWEST CORNER OF THE BASEMENT. DEPTH OF MATERIAL REMOVED VARIED FROM 2 TO 6 FEET EXTENDING FROM THE SOUTH WEST CORNER 40 FEET NORTH AND 55 FEET EAST IN A TRIANGULAR SHAPE. THE CONTRACTOR PLANS TO BACKFILL THIS EXCAVATION WITH A CLAYEY SAND AND GRAVEL IMPORTED FROM MOBIL PRE-MIX. BACKFILL WILL BEGIN ON THURSDAY (1-2-86).

IN OUR OPINION, FILL COMPACTION MEETS SPECIFICATIONS AS INDICATED BY OUR OBSERVATIONS AND TEST NO.(S)
IN OUR OPINION, FILL COMPACTION DOES NOT MEET SPECIFICATIONS AS INDICATED BY OUR OBSERVATIONS AND TEST NO.(S)
AND SHOULD BE REWORKED

SCOPE OF OBSERVATION: ☐ FULL TIME; ☒ PERIODIC, ON CALL BASIS; ☒ CONTRACTOR'S OR CLIENT'S REPRESENTATIVE ADVISED

CTL/THOMPSON, INC.

DELMAR FISCHER

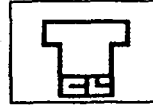
FIELD REPRESENTATIVE

APPROVED BY

RONALD M. MC CUMBER, P.E.

DF:PV

Compaction Test Report



CTL/THOMPSON, INC.
CONSULTING GEOTECHNICAL
AND MATERIALS ENGINEERS

1971 WEST 12TH AVE., DENVER, CO 80204
(303) 825-0777

CLIENT: PEPSI COLA COMPANY
3801 BRIGHTON BOULEVARD
DENVER, COLORADO 80216

DATE: 1-2-86 JOB NO. 12532
REPORT NO. 3 SHEET 1 OF 1
SUBJECT

PEPSI-COLA SPORTS FACILITY ADDITION
3801 BRIGHTON BOULEVARD
STRUCTURAL FILL PLACEMENT

TEST NO.	LOCATION	DEPTH FEET *	TEST TYPE	LABORATORY		FIELD			SOIL TYPE
				MAX DENSITY PCF	OMC %	DRY DENSITY PCF	MC %	COMPACTION %	
	FROM THE SOUTH WEST CORNER OF THE BASEMENT:								
1	5'N & 30'E	5.0	NUC	130	7.5	124	8.6	95	CURVE #1 JOB #11870
2	5'N & 35'E	4.0	NUC	130	7.5	125	7.6	96	" "
3	8'N & 20'E	2.7	NUC	128.5	9.5	130	7.6	** 100+	CURVE #1 JOB #12167
4	5'N & 45'E	1.5	NUC	128.5	9.5	128	8.1	** 100	" "
5	8'N & 35'E	0.5	NUC	128.5	9.5	128	7.0	** 100	" "
*	BELOW FLOOR SUBGRADE								
**	SPECIFICATIONS 98% OF MAXIMUM ASTM D 698								

SPECIFICATIONS: 95 % OF MAXIMUM ASTM D 1557
MOISTURE WITHIN ± 2 % OF OPTIMUM

TYPE OF COMPACTION EQUIPMENT AND NO. OF UNITS:
(1) 'REX' SHEEPSFOOT ROLLER

MOISTURE ADDED BY (1) GARDEN HOSE
THICKNESS OF LIFT 12 INCHES

TYPE OF EARTH MOVING EQUIPMENT AND NO. OF UNITS:
(1) FRONT LOADER

THIS REPORT PRESENTS OPINIONS FORMED AS A RESULT OF OUR OBSERVATION OF FILL PLACEMENT, AS WELL AS THE TESTS SHOWN ABOVE. WE HAVE RELIED UPON THE CONTRACTOR TO APPLY THE NECESSARY COMPACTION EFFORT AND MOISTURE TO ACHIEVE SPECIFIED COMPACTION DURING TIMES WHEN OUR OBSERVER IS NOT PRESENT, AND AT LOCATIONS OTHER THAN THOSE TESTED. TEST DATA ARE NOT THE SOLE BASIS FOR OPINIONS ON WHETHER THE FILL MEETS SPECIFICATIONS.

PROGRESS REPORT DURING THIS VISIT THE CONTRACTOR BEGAN AND COMPLETED THE STRUCTURAL BACKFILL IN THE EXCAVATION CAUSED BY THE REMOVAL OF DEBRIS FILL IN THE SOUTH WEST CORNER OF THE BASEMENT.

☒ IN OUR OPINION, FILL COMPACTION MEETS SPECIFICATIONS AS INDICATED BY OUR OBSERVATIONS AND TEST NO.(S) 1-5

☐ IN OUR OPINION, FILL COMPACTION DOES NOT MEET SPECIFICATIONS AS INDICATED BY OUR OBSERVATIONS AND TEST NO.(S) _____

AND SHOULD BE REWORKED

SCOPE OF OBSERVATION: ☐ FULL TIME; ☒ PERIODIC, ON CALL BASIS; ☒ CONTRACTOR'S OR CLIENT'S REPRESENTATIVE ADVISED DARREL/REID BURTON

CTL/THOMPSON, INC.

DELMAR FISCHER
FIELD REPRESENTATIVE

APPROVED BY

RONALD M. MC OMBER, P.E.

JPV

Compaction Test Report



CTL/THOMPSON, INC.
CONSULTING GEOTECHNICAL
AND MATERIALS ENGINEERS

1971 WEST 12TH AVE., DENVER, CO 80204
(303) 825-0777

CLIENT:

PEPSI COLA COMPANY
3801 BRIGHTON BOULEVARD
DENVER, COLORADO 80216

DATE: 01-14-86 JOB NO. 12532

REPORT NO. 4 SHEET 1 OF 1

SUBJECT PEPSI COLA SPORTS FACILITY ADDITION
3801 BRIGHTON BOULEVARD
RACKETBALL COURT AREA
EXCAVATION INSPECTION

TEST NO.	LOCATION	DEPTH FEET	TEST TYPE	LABORATORY		FIELD			SOIL TYPE
				MAX DENSITY PCF	OMC %	DRY DENSITY PCF	MC %	COMPACTION %	

SPECIFICATIONS:

MOISTURE WITHIN _____ % OF MAXIMUM
_____ % OF OPTIMUM
TYPE OF COMPACTION EQUIPMENT AND NO. OF UNITS
MOISTURE ADDED BY _____
THICKNESS OF LIFT _____ INCHES
TYPE OF EARTH MOVING EQUIPMENT AND NO. OF UNITS

THIS REPORT PRESENTS OPINIONS FORMED AS A RESULT OF OUR OBSERVATION OF FILL PLACEMENT, AS WELL AS THE TESTS SHOWN ABOVE. WE HAVE RELIED UPON THE CONTRACTOR TO APPLY THE NECESSARY COMPACTIVE EFFORT AND MOISTURE TO ACHIEVE SPECIFIED COMPACTION DURING TIMES WHEN OUR OBSERVER IS NOT PRESENT, AND AT LOCATIONS OTHER THAN THOSE TESTED. TEST DATA ARE NOT THE SOLE BASIS FOR OPINIONS ON WHETHER THE FILL MEETS SPECIFICATIONS.

PROGRESS REPORT AS REQUESTED BY RON CARPENTER WITH REID BURTON CONSTRUCTION A SITE VISIT WAS MADE TO OBSERVE THE SUBGRADE IN THE EXCAVATION FOR THE RACKET BALL COURT. OUR FIELD REPRESENTATIVE OBSERVED THE SUBGRADE MATERIALS IN THE BOTTOM OF THE EXCAVATION WAS NATURAL SANDS AND GRAVELS. WE INFORMED MR. CARPENTER PLACEMENT OF THE SQUEEGEE COULD BEGIN.

IN OUR OPINION, FILL COMPACTION MEETS SPECIFICATIONS AS INDICATED BY OUR OBSERVATIONS AND TEST NO.(S)

IN OUR OPINION, FILL COMPACTION DOES NOT MEET SPECIFICATIONS AS INDICATED BY OUR OBSERVATIONS AND TEST NO.(S)

AND SHOULD BE REWORKED

SCOPE OF OBSERVATION: FULL TIME: ☒ PERIODIC, ON CALL BASIS: ☒ CONTRACTOR'S OR CLIENT'S REPRESENTATIVE ADVISED: ☒ RON CARPENTER (REID BURTON CONST.)

CTL THOMPSON, INC.

CLARK STEADMAN
REGISTERED
C.S.R.S.

RONALD M. MC OMBER P.E.



CTL/THOMPSON, INC.
CONSULTING GEOTECHNICAL
AND MATERIALS ENGINEERS

1971 WEST 12TH AVE., DENVER, CO 80204
(303) 825-0777

CLIENT:
PEPSI COLA COMPANY
3801 BRIGHTON BOULEVARD
DENVER, COLORADO 80216

DATE: 01-23-86 JOB. NO. 12532
REPORT NO. 5 SHEET 1 OF 1
SUBJECT PEPSI COLA SPORTS FACILITY ADDITION
3801 BRIGHTON BOULEVARD
EXCAVATION INSPECTION

[illegible]

SPECIFICATIONS: _____ % OF MAXIMUM _____
 MOISTURE WITHIN _____ % OF OPTIMUM _____
 TYPE OF COMPACTION EQUIPMENT AND NO. OF UNITS: _____

MOISTURE ADDED BY _____
THICKNESS OF LIFT _____ INCHES
TYPE OF EARTH MOVING EQUIPMENT AND NO. OF UNITS: _____

THIS REPORT PRESENTS OPINIONS FORMED AS A RESULT OF OUR OBSERVATION OF FILL PLACEMENT, AS WELL AS THE TESTS SHOWN ABOVE. WE HAVE RELIED UPON THE CONTRACTOR TO APPLY THE NECESSARY COMPACTIVE EFFORT AND MOISTURE TO ACHIEVE SPECIFIED COMPACTION DURING TIMES WHEN OUR OBSERVER IS NOT PRESENT, AND AT LOCATIONS OTHER THAN THOSE TESTED. TEST DATA ARE NOT THE SOLE BASIS FOR OPINIONS ON WHETHER THE FILL MEETS SPECIFICATIONS.

PROGRESS REPORT AT THE REQUEST OF RON CARPENTER WITH REID BURTON CONSTRUCTION, THE JOB SITE WAS VISITED TO DETERMINE FROST CONTENT IN THE SUBGRADE MATERIAL PRIOR TO POURING CONCRETE SLAB TOMORROW (01-24-86) FOR THE AEROBICS FLOOR OF THE SPORTS CENTER. DURING OUR VISIT THE CONTRACTOR WAS BLADING THE TOP 4 INCHES OF SUBGRADE, TO BE LATER REPLACED WITH SQUEEGEE. NO FROST WAS UNCOVERED IN TOP 8 INCHES OF SUBGRADE. THE TEMPERATURE OF THE SOIL WAS APPROXIMATELY 38°F. NO COMPACTION TESTS WERE REQUESTED BY THE CONTRACTOR.

☐ IN OUR OPINION, FILL COMPACTION MEETS SPECIFICATIONS AS INDICATED BY OUR OBSERVATIONS AND TEST NO.(S) _____
☐ IN OUR OPINION, FILL COMPACTION DOES NOT MEET SPECIFICATIONS AS INDICATED BY OUR OBSERVATIONS AND TEST NO.(S) _____
 AND SHOULD BE REWORKED

COPE OF OBSERVATION: ☐ FULL TIME: ☒ PERIODIC, ON CALL BASIS: ☒ CONTRACTOR'S OR CLIENT'S REPRESENTATIVE ADVISED RON (REID BURTON)

IRK D. SKINNER
FIELD REPRESENTATIVE
DS:RS

CTL/THOMPSON, INC.

APPROVED BY
RONALD M. MC OMBER P.E.



CTL/THOMPSON, INC.
CONSULTING GEOTECHNICAL
AND MATERIALS ENGINEERS
1971 WEST 12TH AVE., DENVER, CO 80204
(303) 825-0777

CLIENT: PEPSI COLA COMPANY
3801 BRIGHTON BOULEVARD
DENVER, COLORADO 80216

DATE: 2-3-86 JOB. NO. 12532
REPORT NO. 7 SHEET 1 OF 1
SUBJECT _____

ATTN: MR. DON PATTON

PEPSI COLA SPORTS FACILITY ADDITION
3801 BRIGHTON BOULEVARD
FOUNDATION WALL BACKFILL

TEST NO.	LOCATION	DEPTH FEET *	TEST TYPE	LABORATORY		FIELD			SOIL TYPE
				MAX DENSITY PCF	OMC %	DRY DENSITY PCF	MC %	COM-PACTION %	
10	25'W OF SOUTH EAST CORNER	12.0	NUC	126.5	10.0	120	9.6	95	CURVE #2
	OF ATHLETIC BUILDING								JOB #11870
*	BELOW GRADE (FEET)								

SPECIFICATIONS: 95 % OF MAXIMUM ASTM D 1557
MOISTURE WITHIN + 2 % OF OPTIMUM

TYPE OF COMPACTION EQUIPMENT AND NO. OF UNITS:

(1) SMOOTH PLATE COMPACTOR

(1). 'WHACKER' TAMPER

MOISTURE ADDED BY _____ NATURAL _____

THICKNESS OF LIFT 12-18 INCHES

TYPE OF EARTH MOVING EQUIPMENT AND NO. OF UNITS:

(1) BACKHOLE

THIS REPORT PRESENTS OPINIONS FORMED AS A RESULT OF OUR OBSERVATION OF FILL PLACEMENT, AS WELL AS THE TESTS SHOWN ABOVE. WE HAVE RELIED UPON THE CONTRACTOR TO APPLY THE NECESSARY COMPACTIVE EFFORT AND MOISTURE TO ACHIEVE SPECIFIED COMPACTION DURING TIMES WHEN OUR OBSERVER IS NOT PRESENT, AND AT LOCATIONS OTHER THAN THOSE TESTED. TEST DATA ARE NOT THE SOLE BASIS FOR OPINIONS ON WHETHER THE FILL MEETS SPECIFICATIONS.

PROGRESS REPORT THE CONTRACTOR IS CONTINUING TO BACKFILL THE FOUNDATION WALL OF THE
ATHLETIC BUILDING.

☒ IN OUR OPINION, FILL COMPACTION MEETS SPECIFICATIONS AS INDICATED BY OUR OBSERVATIONS AND TEST NO.(S) . 10

☐ IN OUR OPINION, FILL COMPACTION DOES NOT MEET SPECIFICATIONS AS INDICATED BY OUR OBSERVATIONS AND TEST NO.(S)

AND SHOULD BE REWORKED

SCOPE OF OBSERVATION: ☐ FULL TIME; ☒ PERIODIC, ON CALL BASIS; ☒ CONTRACTOR'S OR CLIENT'S REPRESENTATIVE ADVISED RON (JOB FOREMAN)

JAMES N. CARETTO

CTL/THOMPSON, INC.

FIELD REPRESENTATIVE

APPROVED BY

RONALD M. MC OMBER, P.E.

JC:PV

Compaction Test Report



CTL/THOMPSON, INC.
CONSULTING GEOTECHNICAL
AND MATERIALS ENGINEERS

1971 WEST 12TH AVE., DENVER, CO 80204
(303) 825-0777

CLIENT:

PEPSI COLA COMPANY
3801 BRIGHTON BOULEVARD
DENVER, COLORADO 80216

ATTN: MR. DON PATTON

DATE: 2-4-86 JOB NO. 12532

REPORT NO. 8 SHEET 1 OF 1

SUBJECT

PEPSI COLA SPORT FACILITY ADDITION
3801 BRIGHTON BOULEVARD
FOUNDATION WALL BACKFILL

TEST NO.	LOCATION	DEPTH FEET *	TEST TYPE	LABORATORY		FIELD			SOIL TYPE
				MAX DENSITY PCF	OMC %	DRY DENSITY PCF	MC %	COM-PACTION %	
11	10'S.E. OF S.W. CORNER (EXTERIOR)	7.0	NUC	122	11.3	116	8.4	94	CURVE #3 JOB #11870
12	CENTER OF S.W. WALL (EXTERIOR)	7.0	NUC	122	11.3	119	7.5	98	" "
13	20'N.W. OF S.E. CORNER (EXTERIOR)	7.0	NUC	122	11.3	119	6.9	98	" "
*	BELOW GRADE								

SPECIFICATIONS: 95 % OF MAXIMUM ASTM D 1557

MOISTURE WITHIN ± 3 % OF OPTIMUM

TYPE OF COMPACTION EQUIPMENT AND NO. OF UNITS:

(2) DOUBLE DRUM ROLLERS

MOISTURE ADDED BY NATURAL

THICKNESS OF LIFT 8-12 INCHES

TYPE OF EARTH MOVING EQUIPMENT AND NO. OF UNITS:

(1) FRONT-END LOADER

THIS REPORT PRESENTS OPINIONS FORMED AS A RESULT OF OUR OBSERVATION OF FILL PLACEMENT, AS WELL AS THE TESTS SHOWN ABOVE. WE HAVE RELIED UPON THE CONTRACTOR TO APPLY THE NECESSARY COMPACTIVE EFFORT AND MOISTURE TO ACHIEVE SPECIFIED COMPACTION DURING TIMES WHEN OUR OBSERVER IS NOT PRESENT, AND AT LOCATIONS OTHER THAN THOSE TESTED. TEST DATA ARE NOT THE SOLE BASIS FOR OPINIONS ON WHETHER THE FILL MEETS SPECIFICATIONS.

PROGRESS REPORT THE CONTRACTOR CONTINUES BACKFILLING ALONG THE EXTERIOR OF THE FOUNDATION WALL FOR THE RACQUETBALL COURT. BRUCE WITH REID BURTON CONSTRUCTION REQUESTED SITE VISITS AT 8:00 AM. AND 1:00 PM. THE CONTRACTOR REROLLED THE AREA OF TEST #11 DURING OUR FIRST VISIT. NO RETEST WAS NECESSARY. AT THE TIME OF OUR SECOND VISIT THE CONTRACTOR INFORMED OUR REPRESENTATIVE THEY WERE NOT READY FOR COMPACTION TESTS.

☐ IN OUR OPINION, FILL COMPACTION MEETS SPECIFICATIONS AS INDICATED BY OUR OBSERVATIONS AND TEST NO.(S) 11-13

☐ IN OUR OPINION, FILL COMPACTION DOES NOT MEET SPECIFICATIONS AS INDICATED BY OUR OBSERVATIONS AND TEST NO.(S) _____

AND SHOULD BE REWORKED

SCOPE OF OBSERVATION: ☐ FULL TIME; ☒ PERIODIC, ON CALL BASIS; ☒ CONTRACTOR'S OR CLIENT'S REPRESENTATIVE ADVISED BRUCE, RON W/

REID BURTON

CTL/THOMPSON, INC.

KIRK D. SKINNER

FIELD REPRESENTATIVE

APPROVED BY

RONALD M. MC OMBER, P.E.

S:PV



CTL/THOMPSON, INC.
CONSULTING GEOTECHNICAL
AND MATERIALS ENGINEERS

1971 WEST 12TH AVE., DENVER, CO 80204
(303) 825-0777

CLIENT:

PEPSI COLA COMPANY
3801 BRIGHTON BOULEVARD
DENVER, COLORADO 80216

ATTN: MR. DON PATTON

DATE: 2-5-86 JOB NO. 12532

REPORT NO. 9 SHEET 1 OF 1

SUBJECT

PEPSI COLA SPORTS FACILITY ADDITION
3801 BRIGHTON BOULEVARD
FOUNDATION WALL BACKFILL

TEST NO.	LOCATION	DEPTH FEET *	TEST TYPE	LABORATORY		FIELD			SOIL TYPE
				MAX DENSITY PCF	OMC %	DRY DENSITY PCF	MC %	COMPACTION %	
14	CENTER OF S.E. WALL	3.0	NUC	128.5	9.5	128	7.5	100	CURVE #1
	RACQUETBALL COURT								JOB #11870
15	5' N.E. OF S. CORNER OF	7.0	NUC	122	10.5	117	11.3	96	CURVE #3
	N.W. WALL								JOB #11870
*	BELOW GRADE								

SPECIFICATIONS: 95 % OF MAXIMUM ASTM D 1557

MOISTURE WITHIN ± 2 % OF OPTIMUM

TYPE OF COMPACTION EQUIPMENT AND NO. OF UNITS:

(1) DOUBLE DRUM ROLLER

MOISTURE ADDED BY NATURAL

THICKNESS OF LIFT 10-14 INCHES

TYPE OF EARTH MOVING EQUIPMENT AND NO. OF UNITS:

(1) FRONT-END LOADER

THIS REPORT PRESENTS OPINIONS FORMED AS A RESULT OF OUR OBSERVATION OF FILL PLACEMENT, AS WELL AS THE TESTS SHOWN ABOVE. WE HAVE RELIED UPON THE CONTRACTOR TO APPLY THE NECESSARY COMPACTIVE EFFORT AND MOISTURE TO ACHIEVE SPECIFIED COMPACTION DURING TIMES WHEN OUR OBSERVER IS NOT PRESENT, AND AT LOCATIONS OTHER THAN THOSE TESTED. TEST DATA ARE NOT THE SOLE BASIS FOR OPINIONS ON WHETHER THE FILL MEETS SPECIFICATIONS.

PROGRESS REPORT AS REQUESTED BY BRUCE WITH REID BURTON CONSTRUCTION, THE SITE WAS VISITED AT 8:30 AM AND 1:00 PM. THE CONTRACTOR WAS PLACING BACKFILL ALONG THE EXTERIOR FOUNDATION WALL OF THE RACQUETBALL COURT.

☒ IN OUR OPINION, FILL COMPACTION MEETS SPECIFICATIONS AS INDICATED BY OUR OBSERVATIONS AND TEST NO.(S) 14-15

1 IN OUR OPINION, FILL COMPACTION DOES NOT MEET SPECIFICATIONS AS INDICATED BY OUR OBSERVATIONS AND TEST NO.(S)

AND SHOULD BE REWORKED

COPE OF OBSERVATION: ☐ FULL TIME; ☒ PERIODIC, ON CALL BASIS; ☒ CONTRACTOR'S OR CLIENT'S REPRESENTATIVE ADVISED RON W/REID

BURTON CONSTRUCTION.

CTL/THOMPSON, INC.

KIRK D. SKINNER
ELD REPRESENTATIVE

APPROVED BY

RONALD M. MC OMBER, P.E.

KS:PV

Compaction Test Report



CTL/THOMPSON, INC.
CONSULTING GEOTECHNICAL
AND MATERIALS ENGINEERS

1971 WEST 12TH AVE., DENVER, CO 80204
(303) 825-0777

CLIENT: PEPSI COLA COMPANY
3801 BRIGHTON BOULEVARD
DENVER, COLORADO 80215

ATTN: MR. DON PATTON

DATE: 1-6-86 JOB NO. 12532
REPORT NO. 10 SHEET 1 OF 1
SUBJECT

PEPSI COLA SPORTS FACILITY ADDITION
3801 BRIGHTON BOULEVARD
FOUNDATION WALL BACKFILL (EXTERIOR)

TEST NO.	LOCATION	DEPTH FEET *	TEST TYPE	LABORATORY		FIELD			SOIL TYPE
				MAX DENSITY PCF	OMC %	DRY DENSITY PCF	MC %	COMPACTION %	
16	5' N.E. OF WEST CORNER	3.0	NUC	122	11.3	115	9.5	94	CURVE #3 JOB #11870
17	5' S.E. OF WEST CORNER	3.0	NUC	122	11.3	116	8.4	94	" "
18	18' S.E. OF WEST CORNER	3.0	NUC	126.5	10.0	122	7.5	96	CURVE #2 JOB #11870
17A	RETEST OF #17		NUC	122	11.3	115	7.8	94	CURVE #3 JOB #11870
17B	RETEST OF #17		NUC	122	11.3	119	8.5	98	" "
16A	RETEST OF #16		NUC	122	11.3	120	11.9	98	" "
19	1' S OF SOUTH CORNER	1.0	NUC	122	11.3	121	8.5	99	" "
20	4' N.W. OF S. CORNER	1.0	NUC	122	11.3	120	9.2	92	" "

* BELOW GRADE

SPECIFICATIONS: 95 % OF MAXIMUM ASTM D 1557
MOISTURE WITHIN ± 3 % OF OPTIMUM

EQUIPMENT AND NO. OF UNITS:

(1) DOUBLE DRUM ROLLER

(2) TAMPERS

MOISTURE ADDED BY NATURAL

THICKNESS OF LIFT 10-12 INCHES

EQUIPMENT AND NO. OF UNITS:

(1) FRONT END LOADER

THIS REPORT PRESENTS OPINIONS FORMED AS A RESULT OF OUR OBSERVATION OF FILL PLACEMENT, AS WELL AS THE TESTS SHOWN ABOVE. WE HAVE RELIED UPON THE CONTRACTOR TO APPLY THE NECESSARY COMPACTION EFFORT AND MOISTURE TO ACHIEVE SPECIFIED COMPACTION DURING TIMES WHEN OUR OBSERVER IS NOT PRESENT, AND AT LOCATIONS OTHER THAN THOSE TESTED. TEST DATA ARE NOT THE SOLE BASIS FOR OPINIONS ON WHETHER THE FILL MEETS SPECIFICATIONS.

PROGRESS REPORT AS REQUESTED, BY BRUCE WITH REID BURTON CONSTRUCTION THE JOB SITE WAS VISITED TO PERFORM COMPACTION TESTS ON THE EXTERIOR FOUNDATION WALL BACKFILL. DURING OUR FIRST VISIT THE CONTRACTOR WAS INFORMED OF UNSATISFACTORY COMPACTION WITHIN 1.5 FEET ON THE WALL AS INDICATED BY TESTS #16 AND #17. TWO SMALL TAMPERS WERE BROUGHT TO THE JOB SITE AT NOON TO RECOMPACT THIS AREA.

IN OUR OPINION, FILL COMPACTION MEETS SPECIFICATIONS AS INDICATED BY OUR OBSERVATIONS AND TEST NO.(S) 18, 17B, 16A, 19, 20

IN OUR OPINION, FILL COMPACTION DOES NOT MEET SPECIFICATIONS AS INDICATED BY OUR OBSERVATIONS AND TEST NO.(S)

AND SHOULD BE REWORKED

SCOPE OF OBSERVATION: ☐ FULL TIME; ☒ PERIODIC, ON CALL BASIS; ☒ CONTRACTOR'S OR CLIENT'S REPRESENTATIVE ADVISED RON W/REID BURTON CONSTRUCTION.

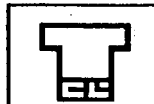
CTL/THOMPSON, INC.

KIRK D. SKINNER

FIELD REPRESENTATIVE

APPROVED BY RONALD M. MC OMBER, P.E.

Compaction Test Report



CTL/THOMPSON, INC.
CONSULTING GEOTECHNICAL
AND MATERIALS ENGINEERS
1971 WEST 12TH AVE., DENVER, CO 80204
(303) 825-0777

CLIENT: PEPSI COLA COMPANY
3801 BRIGHTON BOULEVARD
DENVER, COLORADO 80216
ATTN: MR. DON PATTON

DATE: 2-7-86 JOB NO. 12532
REPORT NO. 11 SHEET 1 OF 1
SUBJECT
PEPSI COLA, SPORTS FACILITY ADDITION
3801 BRIGHTON BOULEVARD
FOUNDATION WALL BACKFILL
(EXTERIOR)

TEST NO.	LOCATION	DEPTH FEET *	TEST TYPE	LABORATORY		FIELD			SOIL TYPE
				MAX DENSITY PCF	OMC %	DRY DENSITY PCF	MC %	COMPACTION %	
21	7'S.E. OF W. CORNER	0.0	NUC	126.5	10.0	113	6.7	89	CURVE #2 JOB #11870
22	22'S.E. OF WEST CORNER	0.0	NUC	126.5	10.0	113	6.7	89	" "
21A	RETEST OF #21		NUC	126.5	10.0	126	5.7	100	" "
22	RETEST OF #22		NUC	126.5	10.0	124	6.0	98	" "
23	4'S.W. OF EAST CORNER	10.0	NUC	126.5	10.0	122	8.9	96	" "
24	10'S.W. OF EAST CORNER	6.0	NUC	128.5	9.5	127	7.7	99**	CURVE #1 JOB #12167
*	BELOW GRADE								

** 98% OF MAXIMUM ASTM D 698

SPECIFICATIONS: 95 % OF MAXIMUM ASTM D 1557
MOISTURE WITHIN ± 3 % OF OPTIMUM

TYPE OF COMPACTION EQUIPMENT AND NO. OF UNITS:

(2) TAMPERS

(1) DOUBLE DRUM ROLLER

MOISTURE ADDED BY -----

THICKNESS OF LIFT 10-12 INCHES

TYPE OF EARTH MOVING EQUIPMENT AND NO. OF UNITS:

(1) FRONT-END LOADER

THIS REPORT PRESENTS OPINIONS FORMED AS A RESULT OF OUR OBSERVATION OF FILL PLACEMENT, AS WELL AS THE TESTS SHOWN ABOVE. WE HAVE RELIED UPON THE CONTRACTOR TO APPLY THE NECESSARY COMPACTIVE EFFORT AND MOISTURE TO ACHIEVE SPECIFIED COMPACTION DURING TIMES WHEN OUR OBSERVER IS NOT PRESENT, AND AT LOCATIONS OTHER THAN THOSE TESTED. TEST DATA ARE NOT THE SOLE BASIS FOR OPINIONS ON WHETHER THE FILL MEETS SPECIFICATIONS.

PROGRESS REPORT CONTRACTOR INFORMED OUR REPRESENTATIVE THE BACKFILL WAS COVERED WITH BLANKETS OVERNIGHT. THE CONTRACTOR WAS INFORMED OF UNSATISFACTORY COMPACTION IN AREA OF TESTS 21 AND 22. THIS AREA WAS THEN WHEEL-ROLLED WITH A FRONT-END LOADER. DURING OUR THIRD VISIT OUR FIELD REPRESENTATIVE NOTICED A 6-INCH THICK LAYER OF ICE IN THE FILL, SOUTHWEST OF THE RACQUET BALL COURT, 1.5 FEET BELOW THE SURFACE. THIS WAS BROUGHT TO THE ATTENTION OF RON CARPENTER WITH REID BURTON CONSTRUCTION. HE INFORMED US THAT THEY HAD PROBLEMS WITH DRAINS AND SURFACE DRAINAGE DURING THE MONTH OF DECEMBER. RON CARPENTER WAS INFORMED THIS ICE SHOULD BE REMOVED PRIOR TO ADDITIONAL FILL
[] IN OUR OPINION, FILL COMPACTION MEETS SPECIFICATIONS AS INDICATED BY OUR OBSERVATIONS AND TEST NO.(S) 21A, 22A, 23, 24 PLACEMENT.
[] IN OUR OPINION, FILL COMPACTION DOES NOT MEET SPECIFICATIONS AS INDICATED BY OUR OBSERVATIONS AND TEST NO.(S) -----

AND SHOULD BE REWORKED

SCOPE OF OBSERVATION: [] FULL TIME; [X] PERIODIC; ON CALL BASIS; [X] CONTRACTOR'S OR CLIENT'S REPRESENTATIVE ADVISED RON CARPENTER W/

REID BURTON
CONSTRUCTION

KIRK D. SKINNER

CTL/THOMPSON, INC.

FIELD REPRESENTATIVE

APPROVED BY

RONALD M. MC OMBER, P.E.



CTL/THOMPSON, INC.
CONSULTING GEOTECHNICAL AND MATERIALS ENGINEERS

February 28, 1986

Pepsi Cola Company
3801 Brighton Boulevard
Denver, Colorado 80216

Attention: Mr. Don Patton

Subject: Footing Inspection
Athletic Complex Addition
Pepsi Plant
3801 Brighton Boulevard
Denver, Colorado
Job No. 12,532

Gentlemen:

As requested, a representative of our office inspected construction of footings at the subject site on February 17, 1986. At this time footings on C line in the Gymnasium and on the south exterior wall of the kitchen were formed. Footings were supported by soils suitable for construction of footings designed for a maximum allowable bearing pressure of 3000 psf as presented in a Soils and Foundation Investigation prepared by our firm for the project (Job No. 11261, revised March 28, 1985). The footings were prepared and steel reinforcement was in place in general conformance with the plans on site.

If we can be of further service, please call.

Very truly yours,

CTL/THOMPSON, INC.

By _____
Ronald M. Mc Omber, P.E.

RMM:pv

(3 copies sent)

1cc: Reid Burton Construction

Date 2-19-86

Date 2-19-86

Subject : Inspection report of Drilled Holes for Piers at
PEPSI COLA SPORTS CENTER

3801 BRIGHTON BOULEVARD

PEPSI COLA COMPANY
3801 BRIGHTON BOULEVARD
DENVER, COLORADO 80216

Daily Report No. 2[illegible]

PIERS WERE NOT COMPLETED

- ☒ Piers inspected. Holes were drilled to proper bearing materials.
- ☒ Pier hole locations shown ON PLANS BY KLIPP ASSOCIATES, JOB #8511

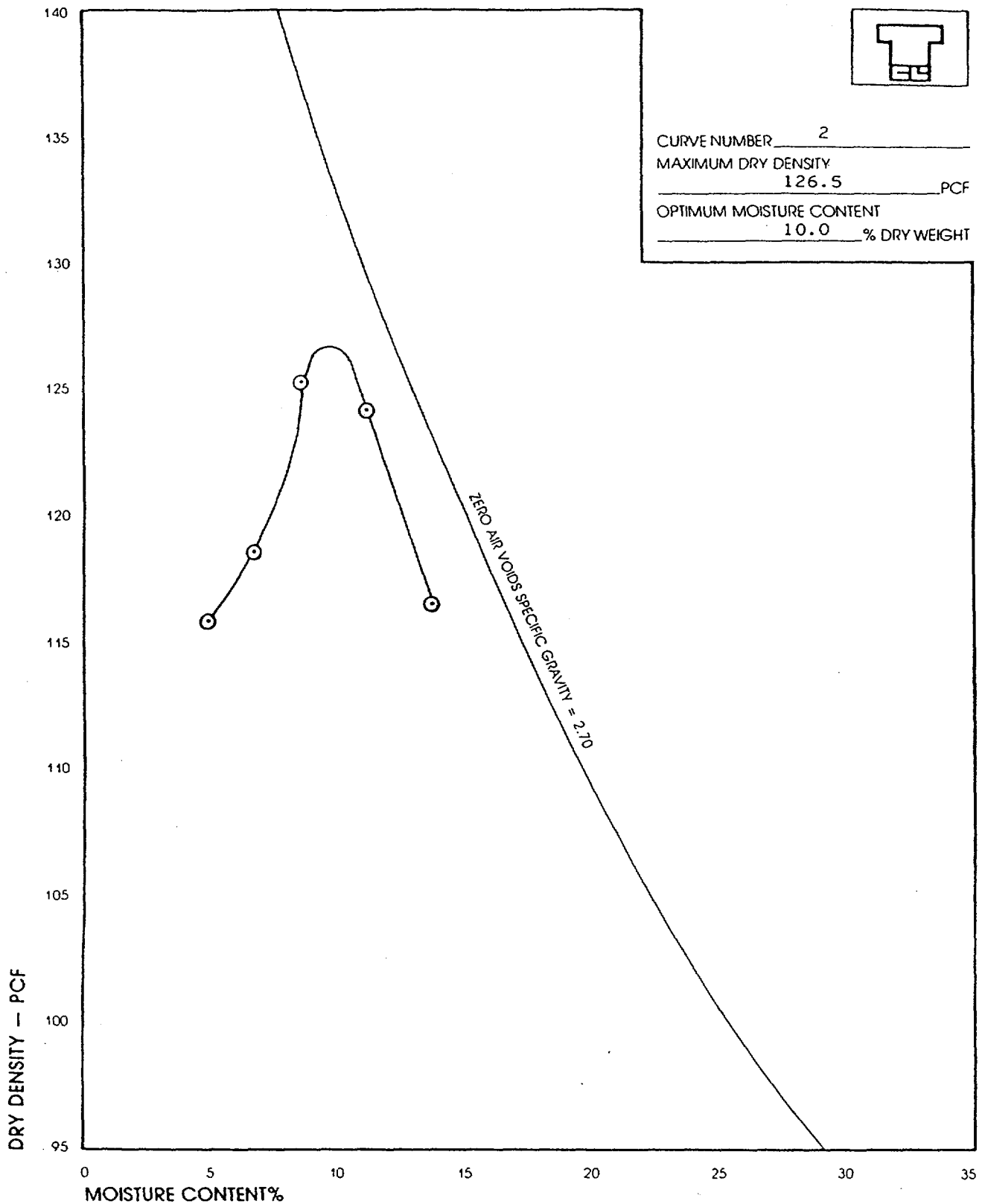
Remarks :

CLARK MORRISON

Field Engineer

Approved by

RONALD M. MC OMBER. P. F.



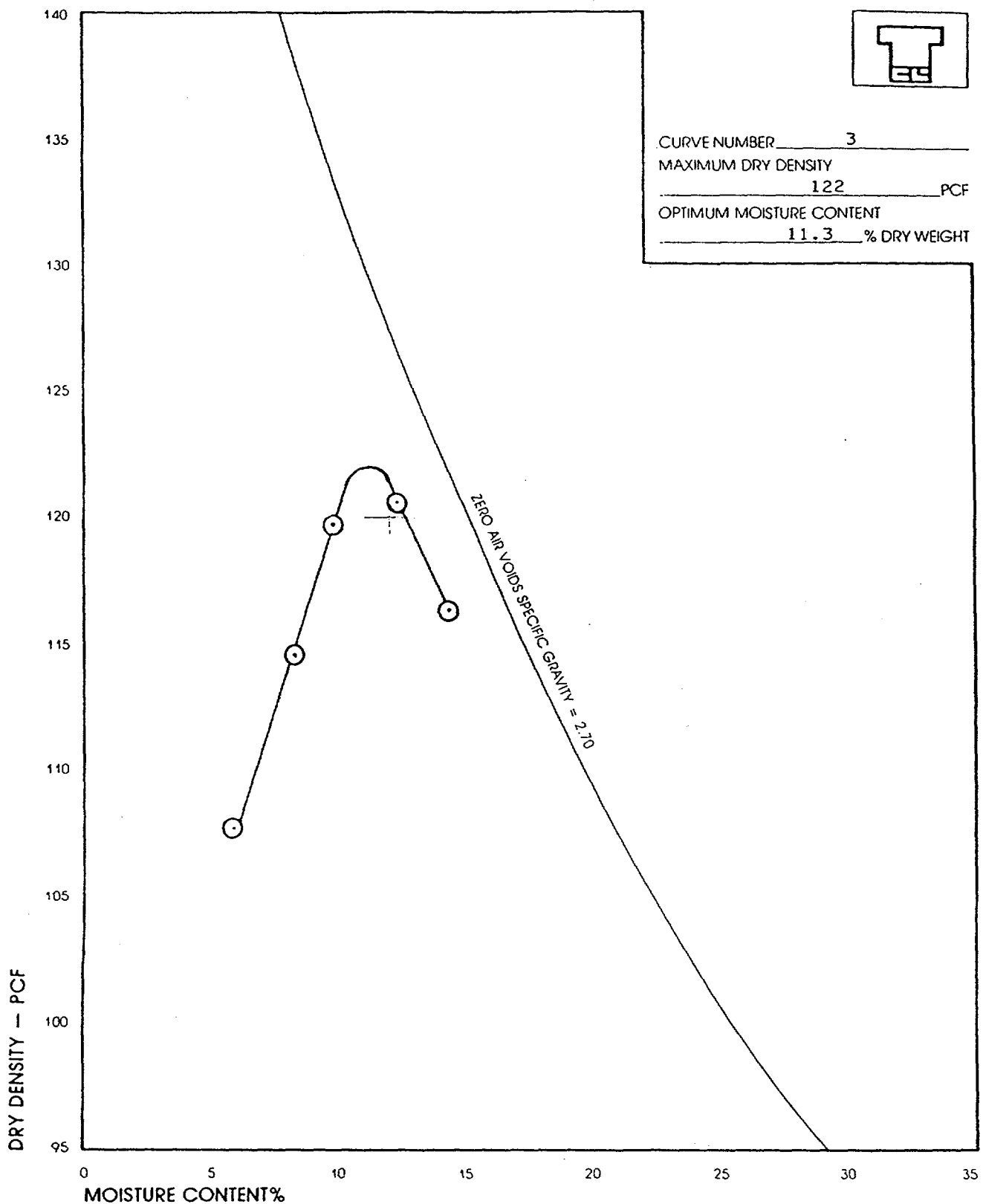
Sample Description SAND, SILTY, GRAVELLY, BROWN

Location PEPSI PLANT - ATHLETIC CENTER
ON SITE MATERIALS

Compaction Test Procedure ASTM D 1557-78
METHOD 'C'

LIQUID LIMIT _____ %
 PLASTICITY INDEX _____ %
 GRAVEL _____ %
 SAND _____ %
 SILT AND CLAY _____ %

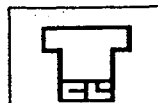
**Compaction
Test Results**



JOB NO. 11870 (12532)

Compaction
Test Results

Compaction Test Report



CTL/THOMPSON, INC.
CONSULTING GEOTECHNICAL
AND MATERIALS ENGINEERS

1971 WEST 12TH AVE. DENVER, CO 80204
(303) 825-0777

CLIENT: PEPSI COLA COMPANY
3801 BRIGHTON BOULEVARD
DENVER, COLORADO 80215

ATTN: MR. DON PATTON

DATE: 1-6-86 JOB NO. 12532
REPORT NO. 10 SHEET 1 OF 1
SUBJECT

PEPSI COLA SPORTS FACILITY ADDITION
3801 BRIGHTON BOULEVARD
FOUNDATION WALL BACKFILL (EXTERIOR)

TEST NO.	LOCATION	DEPTH FEET *	TEST TYPE	LABORATORY		FIELD			SOIL TYPE
				MAX DENSITY PCF	OMC %	DRY DENSITY PCF	MC %	COMPACTION %	
16	5' N.E. OF WEST CORNER	3.0	NUC	122	11.3	115	9.5	94	CURVE #3 JOB #11870
17	5' S.E. OF WEST CORNER	3.0	NUC	122	11.3	116	8.4	94	" "
18	18' S.E. OF WEST CORNER	3.0	NUC	126.5	10.0	122	7.5	96	CURVE #2 JOB #11870
17A	RETEST OF #17		NUC	122	11.3	115	7.8	94	CURVE #3 JOB #11870
17B	RETEST OF #17		NUC	122	11.3	119	8.5	98	" "
16A	RETEST OF #16		NUC	122	11.3	120	11.9	98	" "
19	1' S OF SOUTH CORNER	1.0	NUC	122	11.3	121	8.5	99	" "
20	4' N.W. OF S. CORNER	1.0	NUC	122	11.3	120	9.8	98	" "

* BELOW GRADE

SPECIFICATIONS: 95 % OF MAXIMUM ASTM D 1557
MOISTURE WITHIN ± 3 % OF OPTIMUM

TYPE OF COMPACTION EQUIPMENT AND NO. OF UNITS:

- (1) DOUBLE DRUM ROLLER
(2) TAMPERS

MOISTURE ADDED BY: NATURAL

THICKNESS OF LIFT: 10-12 INCHES

TYPE OF EARTH MOVING EQUIPMENT AND NO. OF UNITS:

- (1) FRONT END LOADER

THIS REPORT PRESENTS OPINIONS FORMED AS A RESULT OF OUR OBSERVATION OF FILL PLACEMENT, AS WELL AS THE TESTS SHOWN ABOVE. WE HAVE RELIED UPON THE CONTRACTOR TO APPLY THE NECESSARY COMPACTION EFFORT AND MOISTURE TO ACHIEVE SPECIFIED COMPACTION DURING TIMES WHEN OUR OBSERVER IS NOT PRESENT, AND AT LOCATIONS OTHER THAN THOSE TESTED. TEST DATA ARE NOT THE SOLE BASIS FOR OPINIONS ON WHETHER THE FILL MEETS SPECIFICATIONS.

PROGRESS REPORT AS REQUESTED, BY BRUCE WITH REID BURTON CONSTRUCTION THE JOB SITE WAS VISITED TO PERFORM COMPACTION TESTS ON THE EXTERIOR FOUNDATION WALL BACKFILL. DURING OUR FIRST VISIT THE CONTRACTOR WAS INFORMED OF UNSATISFACTORY COMPACTION WITHIN 1.5 FEET ON THE WALL AS INDICATED BY TESTS #16 AND #17. TWO SMALL TAMPERS WERE BROUGHT TO THE JOB SITE AT NOON TO RECOMPACT THIS AREA.

IN OUR OPINION, FILL COMPACTION MEETS SPECIFICATIONS AS INDICATED BY OUR OBSERVATIONS AND TEST NO.(S) 18, 17B, 16A, 19, 20

IN OUR OPINION, FILL COMPACTION DOES NOT MEET SPECIFICATIONS AS INDICATED BY OUR OBSERVATIONS AND TEST NO.(S)

AND SHOULD BE REWORKED

SCOPE OF OBSERVATION: FULL TIME: ☒ PERIODIC, ON CALL BASIS: ☒ CONTRACTOR'S OR CLIENT'S REPRESENTATIVE ADVISED RON W/REID BURTON CONSTRUCTION.

CTL/THOMPSON, INC.

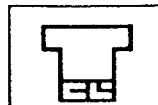
KIRK D. SKINNER

FIELD REPRESENTATIVE

APPROVED BY: RONALD M. MC OMBER, P.E.

S.PV

Compaction Test Report



CTL/THOMPSON, INC.
CONSULTING GEOTECHNICAL
AND MATERIALS ENGINEERS

1971 WEST 12TH AVE., DENVER, CO 80204
(303) 825-0777

CLIENT:

PEPSI COLA COMPANY
3801 BRIGHTON BOULEVARD
DENVER, COLORADO 80216
ATTN: MR. DON PATTON

DATE 2-13-86 JOB NO 12532
REPORT NO 12 SHEET 1 OF 1
SUBJECT

PEPSI COLA SPORTS FACILITY
3801 BRIGHTON BOULEVARD
FOUNDATION WALL BACKFILL

TEST NO.	LOCATION	DEPTH FEET *	TEST TYPE	LABORATORY		FIELD			SOIL TYPE
				MAX DENSITY PCF	OMC %	DRY DENSITY PCF	MC %	COM-PACTION %	
25	4' NW OF E. CORNER	10	NUC	122	11.3	117	8.3	96	CURVE #3 JOB #11870
26	15' NW OF E. CORNER	10	NUC	122	11.3	116	9.2	95	CURVE #3 JOB #11870
27	30' NW OF E. CORNER	9	NUC	122	11.3	116	9.5	95	CURVE #3 JOB #11870
	* BELOW GRADE								

SPECIFICATIONS: 95 % OF MAXIMUM ASTM D1557
MOISTURE WITHIN ± 3 % OF OPTIMUM

TYPE OF COMPACTION EQUIPMENT AND NO. OF UNITS:

(3) TAMPERS

(1) DRUM ROLLER

MOISTURE ADDED BY NATURAL

THICKNESS OF LIFT 8 - 12 INCHES

TYPE OF EARTH MOVING EQUIPMENT AND NO. OF UNITS:

(1) FRONT END LOADER

THIS REPORT PRESENTS OPINIONS FORMED AS A RESULT OF OUR OBSERVATION OF FILL PLACEMENT AS WELL AS THE TESTS SHOWN ABOVE. WE HAVE RELIED UPON THE CONTRACTOR TO APPLY THE NECESSARY COMPACTIVE EFFORT AND MOISTURE TO ACHIEVE SPECIFIED COMPACTION DURING TIMES WHEN OUR OBSERVER IS NOT PRESENT, AND AT LOCATIONS OTHER THAN THOSE TESTED. TEST DATA ARE NOT THE SOLE BASIS FOR OPINIONS ON WHETHER THE FILL MEETS SPECIFICATIONS.

PROGRESS REPORT AS REQUESTED BY REID BURTON CONSTRUCTION THE SITE WAS VISITED THROUGHOUT THE DAY TO PERFORM COMPACTION TESTS ON THE BACKFILL BEING PLACED ON THE NORTHEAST SIDE OF THE RACQUET BALL COURT.

X IN OUR OPINION, FILL COMPACTION MEETS SPECIFICATIONS AS INDICATED BY OUR OBSERVATIONS AND TEST NO.(S) 25 - 27

IN OUR OPINION, FILL COMPACTION DOES NOT MEET SPECIFICATIONS AS INDICATED BY OUR OBSERVATIONS AND TEST NO.(S)

AND SHOULD BE REWORKED

SCOPE OF OBSERVATION: FULL TIME: X PERIODIC, ON CALL BASIS: X CONTRACTOR'S OR CLIENT'S REPRESENTATIVE ADVISED RON CARPENTER

KIRK SKINNER

CTL/THOMPSON, INC.

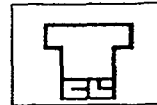
FIELD REPRESENTATIVE

KS:DM

APPROVED BY

RONALD M. MC OMBER, P. E.

Compaction Test Report



CTL/THOMPSON, INC.
CONSULTING GEOTECHNICAL
AND MATERIALS ENGINEERS

1971 WEST 12TH AVE., DENVER, CO 80204
(303) 825-0777

CLIENT

PEPSI COLA COMPANY
3801 BRIGHTON BOULEVARD
DENVER, COLORADO 80216

ATTN: MR. DON PATTON

DATE 2-14-86

JOB NO 12532

REPORTED 13

SHEET 1 OF 1

PROJECT

PEPSI COLA SPORTS FACILITY
3801 BRIGHTON BOULEVARD
FOUNDATION WALL BACKFILL

TEST NO.	LOCATION	DEPTH FEET	TEST TYPE	LABORATORY		FIELD			SOIL TYPE
				MAX DENSITY PCF	OMC %	DRY DENSITY PCF	MC %	COM-PACTION %	
28	5' NW OF E. CORNER	6.0	NUC	122	11.3	119	7.8	98	CURVE #3 JOB #11870
29	20' NW OF E. CORNER	6.0	NUC	122	11.3	119	7.7	98	" "
30	EAST WALL 10' N. OF SE CORNER	1.5	NUC	122	11.3	116	8.6	95	" "
31	EAST WALL 70' N. OF SE CORNER	4.0	NUC	122	11.3	117	8.3	96	" "
	* BELOW GRADE								

SPECIFICATIONS: 95 % OF MAXIMUM ASTM D 1557

MOISTURE WITHIN ± 3

% OF ORIGINAL

TYPE OF COMPACTION EQUIPMENT AND NO. OF UNITS

(1) WALK BEHIND VIBRATORY ROLLER

(2) WHACKERS

MOISTURE ADDED BY NATURAL

THICKNESS OF LIFT 10 - 12

NOTES

TYPE OF EARTH MOVING EQUIPMENT AND NO. OF UNITS

(1) LOADER

THIS REPORT PRESENTS OPINIONS FORMED AS A RESULT OF OUR OBSERVATION OF FILL PLACEMENT, AS WELL AS THE TESTS SHOWN ABOVE. WE HAVE RELIED UPON THE CONTRACTOR TO APPLY THE NECESSARY COMPACTIVE EFFORT AND MOISTURE TO ACHIEVE SPECIFIED COMPACTION DURING TIMES WHEN OUR OBSERVER IS NOT PRESENT, AND AT LOCATIONS OTHER THAN THOSE TESTED. TEST DATA ARE NOT THE SOLE BASIS FOR OPINIONS ON WHETHER THE FILL MEETS SPECIFICATIONS.

PROGRESS REPORT DURING OUR SITE VISITS, THE CONTRACTOR WAS PLACING AND COMPACTING ON SITE FILL MATERIAL ALONG THE EAST WALL OF THE RACQUETBALL COURTS. THE ABOVE DENSITY TESTS WERE PERFORMED THROUGHOUT THE DAY.

X IN OUR OPINION, FILL COMPACTION MEETS SPECIFICATIONS AS INDICATED BY OUR OBSERVATIONS AND TEST NO(S) 28 - 31

IN OUR OPINION, FILL COMPACTION DOES NOT MEET SPECIFICATIONS AS INDICATED BY OUR OBSERVATIONS AND TEST NO(S)

AND SHOULD BE REWORKED

SCOPE OF OBSERVATION: FULL TIME: X PERIODIC, ON CALL BASIS: X CONTRACTOR'S OR CLIENT'S REPRESENTATIVE ADVISED COMPACTION FOREMAN

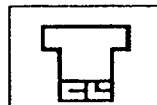
CTL THOMPSON, INC.

KIRK SKINNER/KIRK STEADMAN
FIELD REPRESENTATIVE

RONALD M. MC OMBER, P. E.

KS:KS:DM

Compaction Test Report



CTL/THOMPSON, INC.
CONSULTING GEOTECHNICAL
AND MATERIALS ENGINEERS

1971 WEST 12TH AVE., DENVER, CO 80204
(303) 825-0777

CLIENT:

PEPSI COLA COMPANY
3801 BRIGHTON BOULEVARD
DENVER, COLORADO 80216

ATTN: MR. DON PATTON

DATE 2-17-86

REPORT NO 14

SUBJECT

JOB NO 12532

SHEET 1 OF 1

PEPSI COLA SPORTS FACILITY
3801 BRIGHTON BOULEVARD
FOUNDATION WALL BACKFILL

TEST NO.	LOCATION	DEPTH FEET *	TEST TYPE	LABORATORY		FIELD			SOIL TYPE
				MAX DENSITY PCF	OMC %	DRY DENSITY PCF	MC %	COMPACTION %	
32	NORTH WALL 10' W. OF NE CORNER	4.5	NUC	122	11.3	119	8.3	98	CURVE #3 JOB #11870
33	EAST WALL 5' S. OF NE CORNER	2.0	NUC	122	11.3	117	8.6	96	CURVE #3 JOB #11870
34	EAST WALL 10' S. OF NE CORNER	0.0	NUC	128.5	9.5	127	6.2	** 99	CURVE #1 JOB #12167
35	NORTH WALL 25' W. OF NE CORNER	1.0	NUC	128.5	9.5	123	8.4	** 96	CURVE #1 JOB #12167
	* BELOW GRADE								
	** 98% OF MAXIMUM ASTM D698								

SPECIFICATIONS: 95 % OF MAXIMUM ASTM D1557
MOISTURE WITHIN ± 3 % OF OPTIMUM

TYPE OF COMPACTION EQUIPMENT AND NO. OF UNITS

(1) 815 SHEEPSFOOT ROLLER

(2) WHACKERS. (1) 2 STEEL WHEEL ROLLERS

MOISTURE ADDED BY NATURAL

THICKNESS OF LIFT 8 TO 10

INCHES

TYPE OF EARTH MOVING EQUIPMENT AND NO. OF UNITS

(1) LOADER

THIS REPORT PRESENTS OPINIONS FORMED AS A RESULT OF OUR OBSERVATION OF FILL PLACEMENT, AS WELL AS THE TESTS SHOWN ABOVE. WE HAVE RELIED UPON THE CONTRACTOR TO APPLY THE NECESSARY COMPACTIVE EFFORT AND MOISTURE TO ACHIEVE SPECIFIED COMPACTION DURING TIMES WHEN OUR OBSERVER IS NOT PRESENT, AND AT LOCATIONS OTHER THAN THOSE TESTED. TEST DATA ARE NOT THE SOLE BASIS FOR OPINIONS ON WHETHER THE FILL MEETS SPECIFICATIONS.

PROGRESS REPORT DURING OUR SITE VISITS THE CONTRACTOR WAS PLACING AND COMPACTING FILL MATERIAL ALONG THE FOUNDATION WALL OF THE RACQUETBALL COURTS. THE ABOVE DENSITY TESTS WERE PERFORMED THROUGHOUT THE DAY.

IN OUR OPINION, FILL COMPACTION MEETS SPECIFICATIONS AS INDICATED BY OUR OBSERVATIONS AND TEST NO.(S)

32 - 34

X IN OUR OPINION, FILL COMPACTION DOES NOT MEET SPECIFICATIONS AS INDICATED BY OUR OBSERVATIONS AND TEST NO.(S)

35

AND SHOULD BE REWORKED

SCOPE OF OBSERVATION: FULL TIME; X PERIODIC, ON CALL BASIS; X CONTRACTOR'S OR CLIENT'S REPRESENTATIVE ADVISED

RON (REID BURTON)

CTL/THOMPSON, INC.

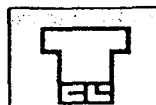
KIRK STEADMAN

FIELD REPRESENTATIVE

KS:DM

APPROVED:

RONALD M. MC OMBER, P. E.



CTL/THOMPSON, INC.
CONSULTING GEOTECHNICAL
AND MATERIALS ENGINEERS
1971 WEST 12TH AVE., DENVER, CO 80204
(303) 825-0777

CLIENT:

DATE: 2-20-86

JOB. NO. 12532

REPORT NO. 15

SHEET 1 OF 1

PEPSI COLA COMPANY
3801 BRIGHTON BOULEVARD
DENVER, COLORADO 80216

SUBJECT PEPSI COLA SPORTS FACILITY
3801 BRIGHTON BOULEVARD
FOUNDATION WALL BACKFILL

ATTN: MR. DON PATTON

TEST NO.	LOCATION	DEPTH FEET *	TEST TYPE	LABORATORY		FIELD			SOIL TYPE
				MAX DENSITY PCF	OMC %	DRY DENSITY PCF	MC %	COM-PACTION %	
36	NORTH WALL OF RACQUETBALL COURTS, 10'W OF NE CORNER	0.0	NUC	122	11.3	119	11.9	98	CURVE #3 JOB #11870
	* BELOW GRADE								

SPECIFICATIONS: 95 % OF MAXIMUM ASTM D 1557
MOISTURE WITHIN ± 3 % OF OPTIMUM

TYPE OF COMPACTION EQUIPMENT AND NO. OF UNITS:

(2) 815 SHEEPSFOOT ROLLERS

(2) WHACKERS (1) 2 STEEL WHEEL ROLLER

MOISTURE ADDED BY NATURAL

HICKNESS OF LIFT 10 - 12 INCHES

TYPE OF EARTH MOVING EQUIPMENT AND NO. OF UNITS

(1) LOADER

THIS REPORT PRESENTS OPINIONS FORMED AS A RESULT OF OUR OBSERVATION OF FILL PLACEMENT, AS WELL AS THE TESTS SHOWN ABOVE. WE HAVE RELIED UPON THE CONTRACTOR TO APPLY THE NECESSARY COMPACTIVE EFFORT AND MOISTURE TO ACHIEVE SPECIFIED COMPACTION DURING TIMES WHEN OUR OBSERVER IS NOT PRESENT, AND AT LOCATIONS OTHER THAN THOSE TESTED. TEST DATA ARE NOT THE SOLE BASIS FOR OPINIONS ON WHETHER THE FILL MEETS SPECIFICATIONS.

ROGRESS REPORT AS REQUESTED BY BRUCE FOSTER WITH REID BURTON A SITE VISIT WAS MADE TO PERFORM DENSITY TESTS ON FOUNDATION WALL BACKFILL. THE SUBCONTRACTOR HAS COMPLETED BACKFILL OF FOUNDATION WALLS UNTIL ADDITIONAL CONSTRUCTION IS COMPLETED.

IN OUR OPINION, FILL COMPACTION MEETS SPECIFICATIONS AS INDICATED BY OUR OBSERVATIONS AND TEST NO.(S) 36

IN OUR OPINION, FILL COMPACTION DOES NOT MEET SPECIFICATIONS AS INDICATED BY OUR OBSERVATIONS AND TEST NO.(S)

AND SHOULD BE REWORKED

COPE OF OBSERVATION: FULL TIME; ☒ PERIODIC, ON CALL BASIS; ☒ CONTRACTOR'S OR CLIENT'S REPRESENTATIVE ADVISED BRUCE (REID BURTON)

CTL THOMPSON, INC.

KIRK STEADMAN
FLD REPRESENTATIVE

2014年11月13日

RONALD M. MC OMBER, P. E.

KS:DM

Compaction Test Report



CTL/THOMPSON, INC.
CONSULTING GEOTECHNICAL
AND MATERIALS ENGINEERS
1971 WEST 12TH AVE., DENVER, CO 80204
(303) 825-0777

CLIENT:

PEPSI COLA COMPANY
3801 BRIGHTON BOULEVARD
DENVER, COLORADO 80216

ATTN: MR. DON PATTON

DATE: 2-21-86 JOB NO. 12532
REPORT NO. 16 SHEET 1 OF 1
SUBJECT

PEPSI COLA SPORTS FACILITY
3801 BRIGHTON BOULEVARD
FOUNDATION WALL BACKFILL

TEST NO.	LOCATION	DEPTH FEET	TEST TYPE	LABORATORY		FIELD			SOIL TYPE
				MAX DENSITY PCF	OMC %	DRY DENSITY PCF	MC %	COMPACTION %	
20A	RETEST OF #20		NUC	122	11.3	116	8.6	95	CURVE #3 JOB #11870

SPECIFICATIONS: 95 % OF MAXIMUM ASTM D 1557
MOISTURE WITHIN ± 3 % OF OPTIMUM
TYPE OF COMPACTION EQUIPMENT AND NO. OF UNITS:

MOISTURE ADDED BY ---
THICKNESS OF LIFT --- INCHES
TYPE OF EARTH MOVING EQUIPMENT AND NO. OF UNITS:

THIS REPORT PRESENTS OPINIONS FORMED AS A RESULT OF OUR OBSERVATION OF FILL PLACEMENT, AS WELL AS THE TESTS SHOWN ABOVE. WE HAVE RELIED UPON THE CONTRACTOR TO APPLY THE NECESSARY COMPACTIVE EFFORT AND MOISTURE TO ACHIEVE SPECIFIED COMPACTION DURING TIMES WHEN OUR OBSERVER IS NOT PRESENT, AND AT LOCATIONS OTHER THAN THOSE TESTED. TEST DATA ARE NOT THE SOLE BASIS FOR OPINIONS ON WHETHER THE FILL MEETS SPECIFICATIONS.

PROGRESS REPORT AS REQUESTED BY BRUCE WITH REID BURTON, A SITE VISIT WAS MADE TO PERFORM DENSITY TESTS ON FOUNDATION WALL BACKFILL. THE ABOVE RETEST WAS PERFORMED AT THIS TIME.

IN OUR OPINION, FILL COMPACTION MEETS SPECIFICATIONS AS INDICATED BY OUR OBSERVATIONS AND TEST NO.(S) 20A

IN OUR OPINION, FILL COMPACTION DOES NOT MEET SPECIFICATIONS AS INDICATED BY OUR OBSERVATIONS AND TEST NO.(S)

AND SHOULD BE REWORKED

SCOPE OF OBSERVATION: FULL TIME: X PERIODIC, ON CALL BASIS: X CONTRACTOR'S OR CLIENT'S REPRESENTATIVE ADVISED BRUCE (REID BURTON)

KIRK STEADMAN

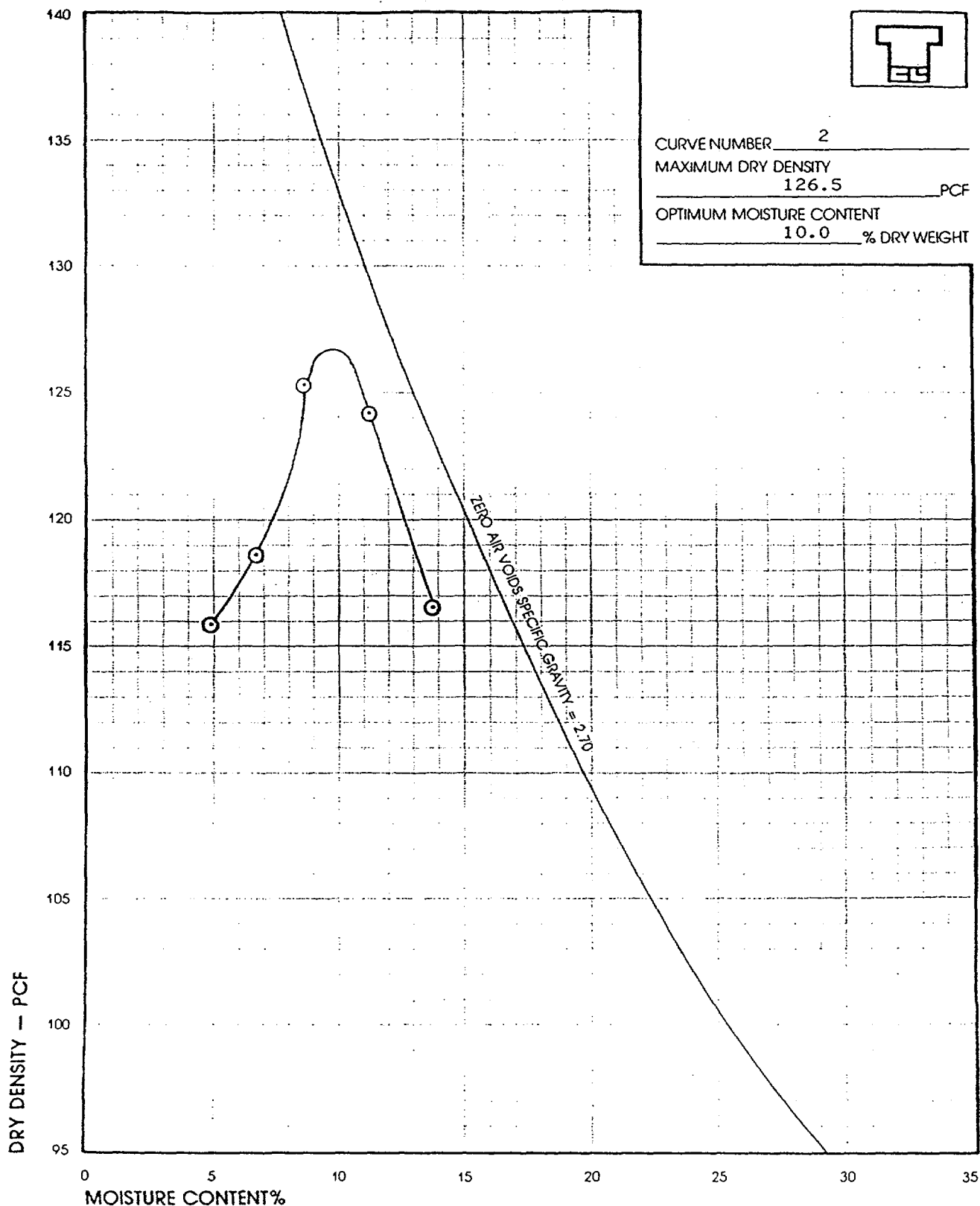
FIELD REPRESENTATIVE

KS:DM

CTL THOMPSON, INC.

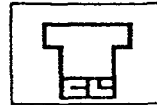
APPROVED BY

RONALD M. MC OMBER, P. E.



Compaction Test Results

Compaction Test Report



CTL/THOMPSON, INC.
CONSULTING GEOTECHNICAL
AND MATERIALS ENGINEERS
1971 WEST 12TH AVE., DENVER, CO 80204
(303) 825-0777

CLIENT: PEPSI COLA COMPANY
3801 BIRGHTON BOULEVARD
DENVER, COLORADO 80216

ATTN: MR. DON PATTON

DATE: 2-26-86 JOB NO. 12532
REPORT NO. 17 SHEET 1 OF 1
SUBJECT

PEPSI COLA SPORTS FACILITY
3801 BRIGHTON BOULEVARD
FOUNDATION WALL BACKFILL

TEST NO.	LOCATION	DEPTH FEET *	TEST TYPE	LABORATORY		FIELD			SOIL TYPE
				MAX DENSITY PCF	OMC %	DRY DENSITY PCF	MC %	COM-PACTION %	
37	GRID LINE D-11, S. SIDE OF FOOTING	0.0	NUC	126.5	10.0	124	7.3	98	CURVE #2 JOB #11870
38	GRID LINE D-10, N. SIDE OF FOOTING	0.0	NUC	126.5	10.0	123	6.5	97	" "
39	GRID LINE C-10.5 S. SIDE OF FOOTING	0.0	NUC	126.5	10.0	121	5.2	96	" "
40	GRID LINE C-11.5, N. SIDE OF FOOTING	0.0	NUC	126.5	10.0	121	5.2	96	" "
41	FOUNDATION WALL, GRID LINE 11-A, 15' N.E. OF E. CORNER OF RAQUET BALL COURT	1.5	NUC	126.5	10.0	123	4.4	97	" "
*	BELOW GRADE								

SPECIFICATIONS: 95 % OF MAXIMUM ASTM D 1557

MOISTURE WITHIN ± 3 % OF OPTIMUM

TYPE OF COMPACTION EQUIPMENT AND NO. OF UNITS:

(2) TAMPERS

MOISTURE ADDED BY NATURAL

THICKNESS OF LIFT NOT OBSERVED INCHES

TYPE OF EARTH MOVING EQUIPMENT AND NO. OF UNITS:

(1) FRONT END LOADER

THIS REPORT PRESENTS OPINIONS FORMED AS A RESULT OF OUR OBSERVATION OF FILL PLACEMENT, AS WELL AS THE TESTS SHOWN ABOVE. WE HAVE RELIED UPON THE CONTRACTOR TO APPLY THE NECESSARY COMPACTION EFFORT AND MOISTURE TO ACHIEVE SPECIFIED COMPACTION DURING TIMES WHEN OUR OBSERVER IS NOT PRESENT, AND AT LOCATIONS OTHER THAN THOSE TESTED. TEST DATA ARE NOT THE SOLE BASIS FOR OPINIONS ON WHETHER THE FILL MEETS SPECIFICATIONS.

PROGRESS REPORT AS REQUESTED BY RON CARPENTER WITH REID BURTON CONSTRUCTION, THE SITE WAS VISITED TO PERFORM COMPACTION TESTS ON BACKFILL MATERIAL FOR FOOTINGS ON GRID LINES D & C AND ON FOUNDATION WALL BACKFILL N.E. OF THE RACQUET BALL COURTS. COMPACTION HAD BEEN COMPLETED PRIOR TO OUR VISIT.

X IN OUR OPINION, FILL COMPACTION MEETS SPECIFICATIONS AS INDICATED BY OUR OBSERVATIONS AND TEST NO(S) 37-41

IN OUR OPINION, FILL COMPACTION DOES NOT MEET SPECIFICATIONS AS INDICATED BY OUR OBSERVATIONS AND TEST NO(S)

AND SHOULD BE REWORKED

SCOPE OF OBSERVATION: ☐ FULL TIME; ☒ PERIODIC, ON CALL BASIS; ☒ CONTRACTOR'S OR CLIENT'S REPRESENTATIVE ADVISED RON CARPENTER/REID BURTON

CTL/THOMPSON, INC.

KIRK D. SKINNER

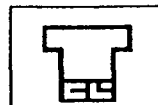
FIELD REPRESENTATIVE

APPROVED BY

RONALD M. MC OMBER, P.E.

CS:PV

Compaction Test Report



CTL/THOMPSON, INC.
CONSULTING GEOTECHNICAL
AND MATERIALS ENGINEERS

1971 WEST 12TH AVE., DENVER, CO 80204
(303) 825-0777

CLIENT: PEPSI COLA COMPANY
3801 BRIGHTON BOULEVARD
DENVER, COLORADO 80216

ATTN: MR. DON PATTON

DATE: 3-5-86 JOB NO. 12532
REPORT NO. 18 SHEET 1 OF 1
SUBJECT

PEPSI COLA SPORTS FACILITY
3801 BRIGHTON BOULEVARD
FOUNDATION WALL BACKFILL

TEST NO.	LOCATION	DEPTH FEET *	TEST TYPE	LABORATORY		FIELD			SOIL TYPE
				MAX DENSITY PCF	OMC %	DRY DENSITY PCF	MC %	COM-PACTION %	
42	12' N.E. OF S. CORNER OF RAQUET BALL COURT	9.0	NUC	128.5	9.5	126	9.0	98	CURVE #1 JOB #12167
43	S. CORNER OF RACQUET BALL COURT	8.0	NUC	128.5	9.5	130	7.2	100	" "

SPECIFICATIONS: 98 % OF MAXIMUM ASTM D 698
MOISTURE WITHIN ± 3 % OF OPTIMUM

TYPE OF COMPACTION EQUIPMENT AND NO. OF UNITS:

(2) TAMPERS

MOISTURE ADDED BY NATURAL

THICKNESS OF LIFT 6-10 INCHES

TYPE OF EARTH MOVING EQUIPMENT AND NO. OF UNITS:

(1) FRONT END LOADER

THIS REPORT PRESENTS OPINIONS FORMED AS A RESULT OF OUR OBSERVATION OF FILL PLACEMENT, AS WELL AS THE TESTS SHOWN ABOVE. WE HAVE RELIED UPON THE CONTRACTOR TO APPLY THE NECESSARY COMPACTIVE EFFORT AND MOISTURE TO ACHIEVE SPECIFIED COMPACTION DURING TIMES WHEN OUR OBSERVER IS NOT PRESENT, AND AT LOCATIONS OTHER THAN THOSE TESTED. TEST DATA ARE NOT THE SOLE BASIS FOR OPINIONS ON WHETHER THE FILL MEETS SPECIFICATIONS.

PROGRESS REPORT BRUCE WITH REID BURTON CONSTRUCTION REQUESTED COMPACTION TESTS BE PERFORMED ON THE RACQUET BALL COURT EXTERIOR FOUNDATION WALL BACKFILL. THE CONTRACTOR REQUESTED THREE SITE VISITS TOMORROW (3-6-86).

[X] IN OUR OPINION, FILL COMPACTION MEETS SPECIFICATIONS AS INDICATED BY OUR OBSERVATIONS AND TEST NO.(S) 42-43

[] IN OUR OPINION, FILL COMPACTION DOES NOT MEET SPECIFICATIONS AS INDICATED BY OUR OBSERVATIONS AND TEST NO.(S)

AND SHOULD BE REWORKED

SCOPE OF OBSERVATION: [] FULL TIME; [X] PERIODIC, ON CALL BASIS; [X] CONTRACTOR'S OR CLIENT'S REPRESENTATIVE ADVISED

RON CARPENTER/
REID BURTON

KIRK D. SKINNER

FIELD REPRESENTATIVE

KS:PV

CTL-THOMPSON, INC.

APPROVED BY RONALD M. MC CMBER, P.E.

Compaction Test Report



CTL/THOMPSON, INC.
CONSULTING GEOTECHNICAL
AND MATERIALS ENGINEERS

1971 WEST 12TH AVE., DENVER, CO 80204
(303) 825-0777

CLIENT: PEPSI COLA COMPANY
3801 BRIGHTON BOULEVARD
DENVER, COLORADO 80216

ATTN: MR. DON PATTON

DATE: 3-6-86 JOB NO. 12532

REPORT NO. 19 SHEET 1 OF 2

SUBJECT

PEPSI COLA, SPORTS FACILITY
3801 BRIGHTON BOULEVARD
FOUNDATION WALL BACKFILL FOR
GYMNASIUM

TEST NO.	LOCATION	DEPTH FEET *	TEST TYPE	LABORATORY		FIELD			SOIL TYPE
				MAX DENSITY PCF	OMC %	DRY DENSITY PCF	MC %	COMPACTION %	
44	E. CORNER OF GYM INTERIOR	5.5	NUC	122	11.3	114	10.8	93	CURVE #3 JOB #11870
45	20' S.W. OF E. CORNER OF GYM, INTERIOR	4.0	NUC	122	11.3	112	12.9	92	" "
46	CENTER OF S.E. SIDE OF GYM, INTERIOR	3.0	NUC	122	11.3	111	6.7	91	" "
47	CENTER OF S.E. SIDE EXTERIOR	4.0	NUC	122	11.3	117	7.9	96	" "
48	50' N.E. OF S. CORNER OF GYM, EXTERIOR	4.5	NUC	122	11.3	110	6.9	90	" "
44A	RETEST OF #44		NUC	126.5	10.0	127	6.5	100	CURVE #2 JOB #11876
45A	RETEST OF #45		NUC	126.5	10.0	126	8.9	100	" "
46A	RETEST OF #46		NUC	122	11.3	116	9.1	95	CURVE #3 JOB #11870

* BELOW GRADE

SPECIFICATIONS: 95 % OF MAXIMUM ASTM D 1557

MOISTURE WITHIN ± 3 % OF OPTIMUM

TYPE OF COMPACTION EQUIPMENT AND NO. OF UNITS:

(3) TAMPERS, (1) VIBRATORY ROLLER

MOISTURE ADDED BY (1) WATER HOSE

THICKNESS OF LIFT 8-12 INCHES

TYPE OF EARTH MOVING EQUIPMENT AND NO. OF UNITS:

(1) BACKHOE, (1) FRONT-END LOADER

THIS REPORT PRESENTS OPINIONS FORMED AS A RESULT OF OUR OBSERVATION OF FILL PLACEMENT, AS WELL AS THE TESTS SHOWN ABOVE. WE HAVE RELIED UPON THE CONTRACTOR TO APPLY THE NECESSARY COMPACTIVE EFFORT AND MOISTURE TO ACHIEVE SPECIFIED COMPACTION DURING TIMES WHEN OUR OBSERVER IS NOT PRESENT, AND AT LOCATIONS OTHER THAN THOSE TESTED. TEST DATA ARE NOT THE SOLE BASIS FOR OPINIONS ON WHETHER THE FILL MEETS SPECIFICATIONS.

PROGRESS REPORT DURING OUR FIRST VISIT TO THE JOB SITE THE CONTRACTOR WAS INFORMED OF THE UNSATISFACTORY COMPACTION ALONG THE INTERIOR SOUTHEAST FOUNDATION WALL. THE CONTRACTOR EXCAVATED THE TOP TWO FEET AND REPLACED IT WITH DIFFERENT BACKFILL. ALSO A VIBRATING DRUM ROLLER WAS BROUGHT ONTO THE SITE FOR COMPACTION.

☐ IN OUR OPINION, FILL COMPACTION MEETS SPECIFICATIONS AS INDICATED BY OUR OBSERVATIONS AND TEST NO.(S) 47, 44A, 45A, 46A

☒ IN OUR OPINION, FILL COMPACTION DOES NOT MEET SPECIFICATIONS AS INDICATED BY OUR OBSERVATIONS AND TEST NO.(S) 48

AND SHOULD BE REWORKED

SCOPE OF OBSERVATION: ☐ FULL TIME; ☒ PERIODIC, ON CALL BASIS; ☒ CONTRACTOR'S OR CLIENT'S REPRESENTATIVE ADVISED RON CARPENTER

W/REID BURTON

CTL/THOMPSON, INC.

KIRK D. SKINNER

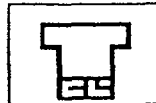
FIELD REPRESENTATIVE

APPROVED BY

RONALD M. MC OMBER, P.E.

KS:PV

Compaction Test Report



CTL/THOMPSON, INC.
CONSULTING GEOTECHNICAL
AND MATERIALS ENGINEERS

1971 WEST 12TH AVE., DENVER, CO 80204
(303) 825-0777

CLIENT: PEPSI COLA COMPANY
3801 BRIGHTON BOULEVARD
DENVER, COLORADO 80216

ATTN: MR. DON PATTON

DATE: 3-6-86 JOB NO. 12532
REPORT NO. 19 SHEET 2 OF 2
SUBJECT

PEPSI COLA, SPORTS FACILITY
3801 BRIGHTON BOULEVARD
FOUNDATION WALL BACKFILL FOR
GYMNASIUM

TEST NO.	LOCATION	DEPTH FEET *	TEST TYPE	LABORATORY		FIELD			SOIL TYPE
				MAX DENSITY PCF	OMC %	DRY DENSITY PCF	MC %	COMPACTION %	
48A	RETEST OF #48		NUC	122	11.3	122	8.2	100	CURVE #3 JOB #11870
49	15' N.W. OF E. CORNER OF GYM, INTERIOR	1.5	NUC	126.5	10.0	127	8.6	100	CURVE #2 JOB #11870
50	30' S.W. OF E. CORNER OF GYM, INTERIOR	1.5	NUC	122	11.3	116	7.9	95	CURVE #3 JOB #11870
51	10' N.E. OF S. CORNER OF GYM, INTERIOR	0.5	NUC	126.5	10.0	124	7.4	98	CURVE #2 JOB #11870
*	BELOW GRADE								

SPECIFICATIONS: 95 % OF MAXIMUM ASTM D 698

MOISTURE WITHIN ± 3 % OF OPTIMUM

TYPE OF COMPACTION EQUIPMENT AND NO. OF UNITS:

(2) TAMPERS

MOISTURE ADDED BY NATURAL

THICKNESS OF LIFT 6-10 INCHES

TYPE OF EARTH MOVING EQUIPMENT AND NO. OF UNITS:

(1) FRONT END LOADER

THIS REPORT PRESENTS OPINIONS FORMED AS A RESULT OF OUR OBSERVATION OF FILL PLACEMENT, AS WELL AS THE TESTS SHOWN ABOVE. WE HAVE RELIED UPON THE CONTRACTOR TO APPLY THE NECESSARY COMPACTIVE EFFORT AND MOISTURE TO ACHIEVE SPECIFIED COMPACTION DURING TIMES WHEN OUR OBSERVER IS NOT PRESENT, AND AT LOCATIONS OTHER THAN THOSE TESTED. TEST DATA ARE NOT THE SOLE BASIS FOR OPINIONS ON WHETHER THE FILL MEETS SPECIFICATIONS.

PROGRESS REPORT SEE SHEET 1 OF REPORT #19.

IN OUR OPINION, FILL COMPACTION MEETS SPECIFICATIONS AS INDICATED BY OUR OBSERVATIONS AND TEST NO(S) 48A, 49-51

IN OUR OPINION, FILL COMPACTION DOES NOT MEET SPECIFICATIONS AS INDICATED BY OUR OBSERVATIONS AND TEST NO(S)

AND SHOULD BE REWORKED

SCOPE OF OBSERVATION: ☐ FULL TIME; ☒ PERIODIC, ON CALL BASIS; ☒ CONTRACTOR'S OR CLIENT'S REPRESENTATIVE ADVISED RON CARPENTER
W/REID BURTON

KIRK D. SKINNER

CTL/THOMPSON, INC.

FIELD REPRESENTATIVE

APPROVED BY

RONALD M. MC OMBER, P.E.

CS:PV

Compaction Test Report



CTL/THOMPSON, INC.
CONSULTING GEOTECHNICAL
AND MATERIALS ENGINEERS

1971 WEST 12TH AVE., DENVER, CO 80204
(303) 825-0777

CLIENT: PEPSI COLA COMPANY
3801 BRIGHTON BOULEVARD
DENVER, COLORADO 80216

ATTN: MR. DON PATTON

DATE: 3-7-86 JOB NO. 12532
REPORT NO. 20 SHEET 1 OF 2
SUBJECT

PEPSI COLA SPORTS FACILITY
3801 BRIGHTON BOULEVARD
FOUNDATION WALL BACKFILL

TEST NO.	LOCATION	DEPTH FEET *	TEST TYPE	LABORATORY		FIELD			SOIL TYPE
				MAX DENSITY PCF	OMC %	DRY DENSITY PCF	MC %	COMPACTION %	
	FROM S.E. CORNER OF THE BUILDING								
52	45'N, 2'E EXTERIOR	3.0	NUC	126.5	10.0	120	8.5	95	CURVE #2 JOB #11870
53	95'N, 3'E EXTERIOR	3.0	NUC	130	7.5	123	7.7	95	CURVE #1 JOB #11870
54	50'N, 2'E INTERIOR	0.0	NUC	130	7.5	123	8.2	95	' ' ' '
55	25'N, 2'E EXTERIOR	0.5	NUC	130	7.5	123	8.3	95	' ' ' '
56	90'N, 3'E EXTERIOR	1.0	NUC	126.5	10.0	120	8.5	95	CURVE #2 JOB #11870
57	75'N, 2'E EXTERIOR	0.0	NUC	122	11.3	117	8.4	96	CURVE #3 JOB #11870
*	BELOW GRADE								

SPECIFICATIONS: 95 % OF MAXIMUM ASTM D 1557
MOISTURE WITHIN ± 3 % OF OPTIMUM

TYPE OF COMPACTION EQUIPMENT AND NO. OF UNITS:

(1) DOUBLE DRUM VIBRATORY ROLLER

(1) WHACKER TAMPER

MOISTURE ADDED BY (1) WATER HOSE

THICKNESS OF LIFT 8 INCHES

TYPE OF EARTH MOVING EQUIPMENT AND NO. OF UNITS:

(1) FRONT-END LOADER

THIS REPORT PRESENTS OPINIONS FORMED AS A RESULT OF OUR OBSERVATION OF FILL PLACEMENT, AS WELL AS THE TESTS SHOWN ABOVE. WE HAVE RELIED UPON THE CONTRACTOR TO APPLY THE NECESSARY COMPACTION EFFORT AND MOISTURE TO ACHIEVE SPECIFIED COMPACTION DURING TIMES WHEN OUR OBSERVER IS NOT PRESENT, AND AT LOCATIONS OTHER THAN THOSE TESTED. TEST DATA ARE NOT THE SOLE BASIS FOR OPINIONS ON WHETHER THE FILL MEETS SPECIFICATIONS

PROGRESS REPORT DURING THE THREE SITE VISITS THE CONTRACTOR CONTINUED TO BACKFILL THE EXTERIOR OF THE SOUTHEAST FOUNDATION WALL OF THE SPORTS CENTER. THE CONTRACTOR WAS ALSO FINE GRADING THE FLOOR SLAB SUBGRADE IN THE SOUTHEAST PORTION OF THE BUILDING.

☒ IN OUR OPINION, FILL COMPACTION MEETS SPECIFICATIONS AS INDICATED BY OUR OBSERVATIONS AND TEST NO.(S) 52-57

☐ IN OUR OPINION, FILL COMPACTION DOES NOT MEET SPECIFICATIONS AS INDICATED BY OUR OBSERVATIONS AND TEST NO.(S)

AND SHOULD BE REWORKED

SCOPE OF OBSERVATION: ☐ FULL TIME; ☒ PERIODIC, ON CALL BASIS; ☒ CONTRACTOR'S OR CLIENT'S REPRESENTATIVE ADVISED DARREL/REID BURTON

DELMAR FISCHER

CTL THOMPSON, INC.

FIELD REPRESENTATIVE

APPROVED BY

RONALD M. MC OMBER, P.E.

DF;PV

Compaction Test Report



CTL/THOMPSON, INC.
CONSULTING GEOTECHNICAL
AND MATERIALS ENGINEERS

1971 WEST 12TH AVE. DENVER, CO 80204
(303) 825-0777

CLIENT: PEPSI COLA COMPANY
3801 BRIGHTON BOULEVARD
DENVER, COLORADO 80216

ATTN: MR. DON PATTON

DATE: 3-7-86 JOB NO. 12532
REPORT NO. 20 SHEET 2 OF 2
SUBJECT

PEPSI COLA SPORTS FACILITY
3801 BRIGHTON BLVD.
UNDER SLAB FILL

TEST NO.	LOCATION	DEPTH FEET *	TEST TYPE	LABORATORY		FIELD			SOIL TYPE
				MAX DENSITY PCF	OMC %	DRY DENSITY PCF	MC %	COMPACTION %	
58	80'N, 12'W FROM S.E. CORNER OF THE BLDG.	0.0	NUC	126.5	10.0	116	9.0	92	CURVE #2 JOB #11870
59	25'N, 12'W FROM S.E. CORNER OF THE BLDG.	0.0	NUC	130	7.5	121	7.0	93	CURVE #1 JOB #11870
58A	RETEST OF 58		NUC	126.5	10.0	121	8.0	96	CURVE #2 JOB #11870
59A	RETEST OF 59		NUC	130	7.5	123	6.6	95	CURVE #1 JOB #11870
*	BELOW GRADE								

SPECIFICATIONS: 95 % OF MAXIMUM ASTM D 1557
MOISTURE WITHIN ± 3 % OF OPTIMUM

TYPE OF COMPACTION EQUIPMENT AND NO. OF UNITS:

(1) DOUBLE DRUM VIBRATORY ROLLER

(1) WHACKER TAMPER

MOISTURE ADDED BY (1) WATER HOSE

THICKNESS OF LIFT 8 INCHES

TYPE OF EARTH MOVING EQUIPMENT AND NO. OF UNITS:

(1) FRONT-END LOADER

THIS REPORT PRESENTS OPINIONS FORMED AS A RESULT OF OUR OBSERVATION OF FILL PLACEMENT, AS WELL AS THE TESTS SHOWN ABOVE. WE HAVE RELIED UPON THE CONTRACTOR TO APPLY THE NECESSARY COMPACTION EFFORT AND MOISTURE TO ACHIEVE SPECIFIED COMPACTION DURING TIMES WHEN OUR OBSERVER IS NOT PRESENT, AND AT LOCATIONS OTHER THAN THOSE TESTED. TEST DATA ARE NOT THE SOLE BASIS FOR OPINIONS ON WHETHER THE FILL MEETS SPECIFICATIONS.

PROGRESS REPORT SEE SHEET 1 OF REPORT #20.

☒ IN OUR OPINION, FILL COMPACTION MEETS SPECIFICATIONS AS INDICATED BY OUR OBSERVATIONS AND TEST NO.(S) 58A, 59A

☐ IN OUR OPINION, FILL COMPACTION DOES NOT MEET SPECIFICATIONS AS INDICATED BY OUR OBSERVATIONS AND TEST NO.(S)

AND SHOULD BE REWORKED

SCOPE OF OBSERVATION: ☐ FULL TIME; ☒ PERIODIC, ON CALL BASIS; ☒ CONTRACTOR'S OR CLIENT'S REPRESENTATIVE ADVISED DARREL/REID BURTON

DELMAR FISCHER

CTL/THOMPSON, INC.

FIELD REPRESENTATIVE

APPROVED BY

RONALD M. MC OMBER, P.E.

DF:PV

Compaction Test Report



CTL/THOMPSON, INC.
CONSULTING GEOTECHNICAL
AND MATERIALS ENGINEERS

1971 WEST 12TH AVE., DENVER, CO 80204
(303) 825-0777

CLIENT: PEPSI COLA COMPANY
3801 BRIGHTON BOULEVARD
DENVER, COLORADO 80216

ATTN: MR. DON PATTON

DATE: 3-10-86 JOB NO. 12532
REPORT NO. 21 SHEET 1 OF 1
SUBJECT

PEPSI COLA, SPORTS FACILITY
3801 BRIGHTON BOULEVARD
FOUNDATION WALL BACKFILL,
GYMNASIUM

TEST NO.	LOCATION	DEPTH FEET *	TEST TYPE	LABORATORY		FIELD			SOIL TYPE
				MAX DENSITY PCF	OMC %	DRY DENSITY PCF	MC %	COMPACTION %	
60	S. CORNER OF GYM, EXTERIOR	0.0	NUC	128.5	9.5	126	8.6	98	CURVE #1 JOB #12167
61	7'N.E. OF S. CORNER OF GYM, EXTERIOR	0.0	NUC	128.5	9.5	127	8.9	99	" "
62	16'N.W. OF S. CORNER OF GYM, EXTERIOR	3.0	NUC	122	11.3	118	7.8	97	CURVE #3 JOB #11870
63	30'N.W. OF S. CORNER OF GYM, EXTERIOR	3.0	NUC	122	11.3	120	11.7	98	" "
64	45'N.W. OF S. CORNER OF GYM, INTERIOR	4.0	NUC	122	11.3	113	6.0	93	" "
*	BELOW GRADE								

SPECIFICATIONS: **98 ASTM D 698
95 % OF MAXIMUM ASTM D 1557
MOISTURE WITHIN ± 3 % OF OPTIMUM

TYPE OF COMPACTION EQUIPMENT AND NO. OF UNITS:
(2) TAMPERS, (1) VIBRATORY DRUM ROLLER

MOISTURE ADDED BY (1) WATER HOSE
THICKNESS OF LIFT 6-10 INCHES

TYPE OF EARTH MOVING EQUIPMENT AND NO. OF UNITS:
(1) BACKHOE

THIS REPORT PRESENTS OPINIONS FORMED AS A RESULT OF OUR OBSERVATION OF FILL PLACEMENT, AS WELL AS THE TESTS SHOWN ABOVE. WE HAVE RELIED UPON THE CONTRACTOR TO APPLY THE NECESSARY COMPACTIVE EFFORT AND MOISTURE TO ACHIEVE SPECIFIED COMPACTION DURING TIMES WHEN OUR OBSERVER IS NOT PRESENT, AND AT LOCATIONS OTHER THAN THOSE TESTED. TEST DATA ARE NOT THE SOLE BASIS FOR OPINIONS ON WHETHER THE FILL MEETS SPECIFICATIONS.

PROGRESS REPORT THE CONTRACTOR BEGAN BACKFILLING THE SOUTHWEST FOUNDATION WALL OF THE GYMNASIUM, ADJACENT TO THE EXISTING BUILDING. THE FOUNDATION SYSTEM IS SUPPORTED BY DRILLED PIERS ALONG THE EDGE OF THE BUILDING. OUR FIELD REPRESENTATIVE WAS INFORMED BY RON CARPENTER WITH REID BURTON CONSTRUCTION THE ON SITE GRAVELS AND SAND WILL BE USED FOR THE FIRST LIFT OF BACKFILL ON THE INTERIOR OF THE FOUNDATION WALL TO HELP BRIDGE IT. TEST #64 INDICATES THE COMPACTION OF SOILS PRIOR TO PLACING FILL. NO RETEST IS NECESSARY.

☐ IN OUR OPINION, FILL COMPACTION MEETS SPECIFICATIONS AS INDICATED BY OUR OBSERVATIONS AND TEST NO.(S) 60-63
☐ IN OUR OPINION, FILL COMPACTION DOES NOT MEET SPECIFICATIONS AS INDICATED BY OUR OBSERVATIONS AND TEST NO.(S) 64
AND SHOULD BE REWORKED

SCOPE OF OBSERVATION: ☐ FULL TIME; ☒ PERIODIC, ON CALL BASIS; ☒ CONTRACTOR'S OR CLIENT'S REPRESENTATIVE ADVISED
RON CARPENTER W/
REID BURTON

CTL/THOMPSON, INC.

KIRK D. SKINNER

FIELD REPRESENTATIVE

APPROVED BY

RONALD M. MC OMBER, P.E.

CS:PV

Compaction Test Report



CTL/THOMPSON, INC.
CONSULTING GEOTECHNICAL
AND MATERIALS ENGINEERS
1971 WEST 12TH AVE., DENVER, CO 80204
(303) 825-0777

CLIENT: PEPSI COLA COMPANY
3801 BRIGHTON BOULEVARD
DENVER, COLORADO 80216

ATTN: MR. DON PATTON

DATE: 3-11-86 JOB NO. 12532
REPORT NO. 22 SHEET 1 OF 1
SUBJECT

PEPSI COLA, SPORTS FACILITY
3801 BRIGHTON BOULEVARD
FOUNDATION WALL BACKFILL
GYMNASIUM

TEST NO.	LOCATION	DEPTH FEET *	TEST TYPE	LABORATORY		FIELD			SOIL TYPE
				MAX DENSITY PCF	OMC %	DRY DENSITY PCF	MC %	COM-PACTION %	
65	INTERIOR 8'N.W. OF S. CORNER	0.0	NUC	128.5	9.5	128	6.3	** 100	CURVE #1 JOB #12167
66	INTERIOR, 40'N.W. OF S. CORNER	0.0	NUC	126.5	10.0	115	6.7	91	CURVE #2 JOB #11870
67	EXTERIOR, 35'N.W. OF S. CORNER	0.0	NUC	126.5	10.0	123	7.8	97	" "
68	EXTERIOR, 50'N.W. OF S. CORNER	0.0	NUC	128.5	9.5	128	7.4	** 100	CURVE #1 JOB #12167
69	EXTERIOR, 15'N.W. OF S. CORNER	1.0	NUC	126.5	10.0	122	8.0	96	CURVE #2 JOB #11870
66A	RETEST OF #66		NUC	126.5	10.0	122	8.5	96	" "
*	BELOW GRADE								

** 98

ASTM D 698

SPECIFICATIONS: 95 % OF MAXIMUM ASTM D 1557

MOISTURE WITHIN ± 3 % OF OPTIMUM

TYPE OF COMPACTION EQUIPMENT AND NO. OF UNITS:

(1) TAMPER (1) DRUM ROLLER (VIBRATORY)

MOISTURE ADDED BY (1) WATER HOSE

THICKNESS OF LIFT 6-8 INCHES

TYPE OF EARTH MOVING EQUIPMENT AND NO. OF UNITS:

(1) BACKHOE

THIS REPORT PRESENTS OPINIONS FORMED AS A RESULT OF OUR OBSERVATION OF FILL PLACEMENT, AS WELL AS THE TESTS SHOWN ABOVE. WE HAVE RELIED UPON THE CONTRACTOR TO APPLY THE NECESSARY COMPACTION EFFORT AND MOISTURE TO ACHIEVE SPECIFIED COMPACTION DURING TIMES WHEN OUR OBSERVER IS NOT PRESENT, AND AT LOCATIONS OTHER THAN THOSE TESTED. TEST DATA ARE NOT THE SOLE BASIS FOR OPINIONS ON WHETHER THE FILL MEETS SPECIFICATIONS.

PROGRESS REPORT AS REQUESTED BY RON CARPENTER, THE JOB SITE WAS VISITED SEVERAL TIMES TO PERFORM COMPACTION TESTS ON FOUNDATION WALL BACKFILL BEING PLACED ON BOTH THE INTERIOR AND EXTERIOR OF THE SOUTHWEST GYMNASIUM WALL.

X IN OUR OPINION, FILL COMPACTION MEETS SPECIFICATIONS AS INDICATED BY OUR OBSERVATIONS AND TEST NO.(S) 65, 67, 68, 69, 66A

IN OUR OPINION, FILL COMPACTION DOES NOT MEET SPECIFICATIONS AS INDICATED BY OUR OBSERVATIONS AND TEST NO.(S)

AND SHOULD BE REWORKED

SCOPE OF OBSERVATION: ☐ FULL TIME; ☒ PERIODIC, ON CALL BASIS; ☒ CONTRACTOR'S OR CLIENT'S REPRESENTATIVE ADVISED RON CARPENTER W/ REID BURTON

CTL/THOMPSON, INC.

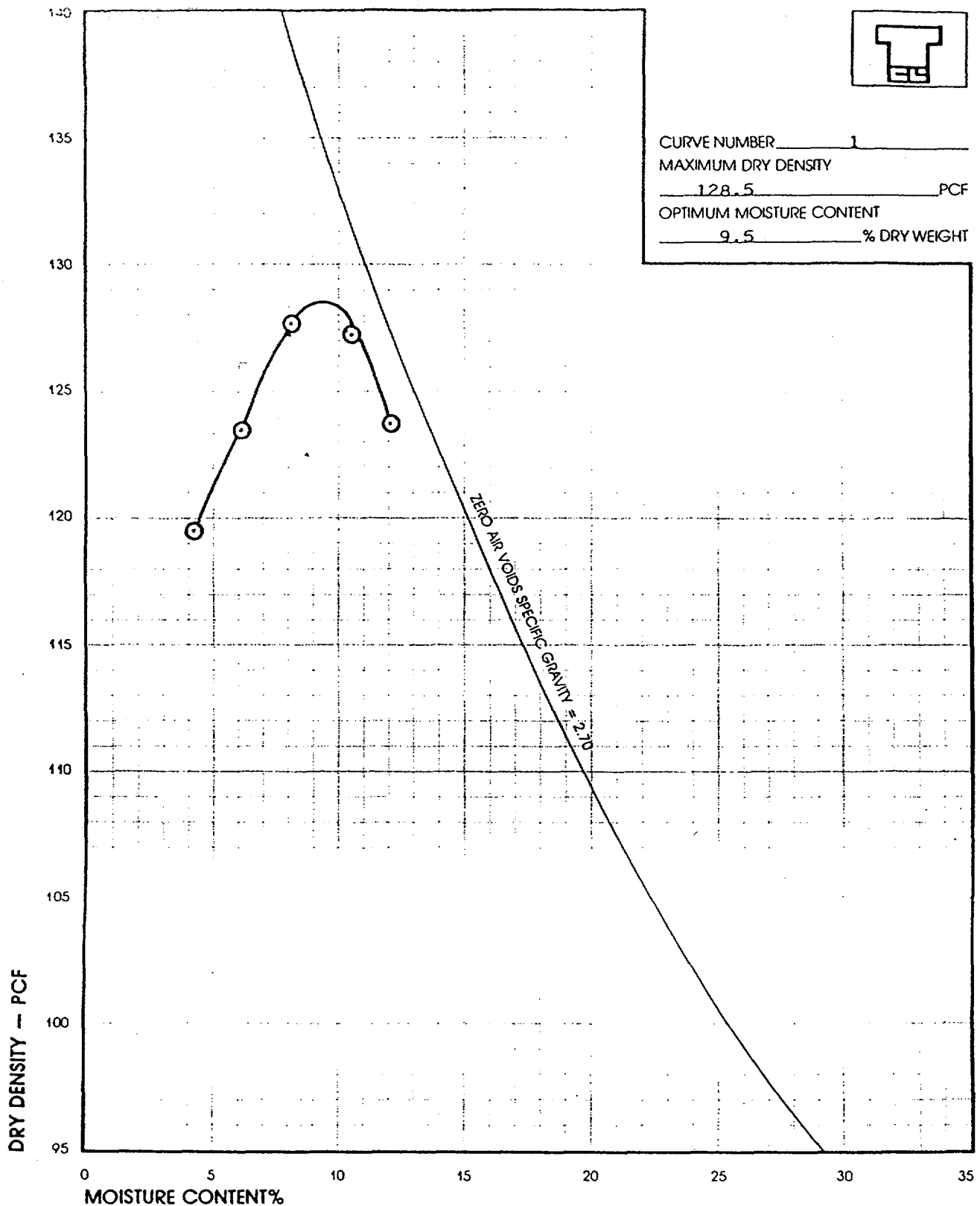
KIRK D. SKINNER

FIELD REPRESENTATIVE

APPROVED BY

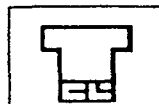
RONALD M. MC DMBER, P.E.

CS:PV



Sample Description SAND-GRAVEL, CLAYEY
RED-BROWN
Location IMPORT TO PEPSI COLA FROM MOBILE
PREMIX
Compaction Test Procedure ASTM D-698-78
METHOD 'C'

LIQUID LIMIT _____ %
PLASTICITY INDEX _____ %
GRAVEL _____ %
SAND _____ %
SILT AND CLAY _____ %



CTL/THOMPSON, INC.
CONSULTING GEOTECHNICAL
AND MATERIALS ENGINEERS

1971 WEST 12TH AVE., DENVER, CO 80204
(303) 825-0777

CLIENT: PEPSI COLA COMPANY
3801 BRIGHTON BOULEVARD
DENVER, COLORADO 80216

ATTN: MR. DON PATTON

DATE: 3-20-86 JOB NO. 12532
REPORT NO. 23 SHEET 1 OF 1
SUBJECT

PEPSI COLA SPORTS FACILITY
3801 BRIGHTON BOULEVARD
FLOOR SLAB SUBGRADE PREPARATION

TEST NO.	LOCATION	DEPTH FEET *	TEST TYPE	LABORATORY		FIELD			SOIL TYPE
				MAX DENSITY PCF **	OMC %	DRY DENSITY PCF	MC %	COM-PACTION %	
70	E. END OF PAD (N. SIDE OF EXISTING BLDG.)	0.5	SAND	133	8.5	133	7.7	100	ROAD BASE
71	W. END OF PAD (N. SIDE OF EXISTING BLDG.)	0.5	SAND	133	8.5	130	7.9	97	" "
* **	BELOW GRADE ESTIMATED BY A ONE-POINT								

SPECIFICATIONS: 95 % OF MAXIMUM ASTM D 1557

MOISTURE WITHIN _____ + 2 _____ % OF OPTIMUM

TYPE OF COMPACTION EQUIPMENT AND NO. OF UNITS:

(1) TAMPER

MOISTURE ADDED BY (1) WATER HOSE

THICKNESS OF LIFT 12 INCHES

TYPE OF EARTH MOVING EQUIPMENT AND NO. OF UNITS:

(1) FRONT END LOADER

THIS REPORT PRESENTS OPINIONS FORMED AS A RESULT OF OUR OBSERVATION OF FILL PLACEMENT, AS WELL AS THE TESTS SHOWN ABOVE. WE HAVE RELIED UPON THE CONTRACTOR TO APPLY THE NECESSARY COMPACTIVE EFFORT AND MOISTURE TO ACHIEVE SPECIFIED COMPACTION DURING TIMES WHEN OUR OBSERVER IS NOT PRESENT, AND AT LOCATIONS OTHER THAN THOSE TESTED. TEST DATA ARE NOT THE SOLE BASIS FOR OPINIONS ON WHETHER THE FILL MEETS SPECIFICATIONS.

PROGRESS REPORT THE CONTRACTOR REQUESTED COMPACTION TESTS ON THE SUBGRADE OF THE FLOOR
SLAB.

X IN OUR OPINION, FILL COMPACTION MEETS SPECIFICATIONS AS INDICATED BY OUR OBSERVATIONS AND TEST NO.(S) 70, 71

IN OUR OPINION, FILL COMPACTION DOES NOT MEET SPECIFICATIONS AS INDICATED BY OUR OBSERVATIONS AND TEST NO.(S)

AND SHOULD BE REWORKED

SCOPE OF OBSERVATION: ☐ FULL TIME; ☒ PERIODIC, ON CALL BASIS; ☒ CONTRACTOR'S OR CLIENT'S REPRESENTATIVE ADVISED

CTL/THOMPSON, INC.

IAN SPLATT

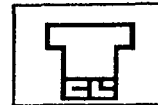
FIELD REPRESENTATIVE

APPROXIDBY

RONALD M. MC OMBER, P.E.

IS:PV

Compaction Test Report



CTL/THOMPSON, INC.
CONSULTING GEOTECHNICAL
AND MATERIALS ENGINEERS
1971 WEST 12TH AVE., DENVER, CO 80204
(303) 825-0777

CLIENT: PEPSI COLA COMPANY
3801 BRIGHTON BOULEVARD
DENVER, COLORADO 80216

ATTN: MR. DON PATTON

DATE: 3-26-86 JOB NO. 12532
REPORT NO. 24 SHEET 1 OF 1
SUBJECT

PEPSI COLA SPORTS FACILITY
3801 BRIGHTON BOULEVARD
FOUNDATION WALL BACKFILL
AND UNDER SLAB FILL

TEST NO.	LOCATION	DEPTH FEET	TEST TYPE	LABORATORY		FIELD			SOIL TYPE
				MAX DENSITY PCF	OMC %	DRY DENSITY PCF	MC %	COMPACTION %	
	(FOUNDATION WALL BACKFILL)	*							
72	EXTERIOR COLUMN LINE C. 3-1	3.0	NUC	130	7.5	124	9.1	95	CURVE #1 JOB #11870
73	INTERIOR COLUMN LINE C. 3-1	2.0	NUC	130	7.5	123	8.5	95	" "
74	EXTERIOR COLUMN LINE D. 1-1	1.5	NUC	130	7.5	126	9.1	97	" "
	TRUCK RAMP NORTH OF WAREHOUSE:								
75	25'N, 35'E FROM EAST ENTRANCE	0.0	NUC	** 132	7.5	127	5.4	96	SAND, GRAVEL
76	28'N, 45'E FROM EAST ENTRANCE	0.0	NUC	** 132	7.5	126	3.9	95	" "
*	BELOW GRADE								

** ESTIMATED BY A ONE-POINT

SPECIFICATIONS: 95 % OF MAXIMUM ASTM D 1557
MOISTURE WITHIN ± 3 % OF OPTIMUM

TYPE OF COMPACTION EQUIPMENT AND NO. OF UNITS:

(2) WHACKER TAMPERS

(1) VIBRATORY PLATE

MOISTURE ADDED BY (1) WATER HOSE

THICKNESS OF LIFT 4-12 INCHES

TYPE OF EARTH MOVING EQUIPMENT AND NO. OF UNITS:

(1) LOADER

THIS REPORT PRESENTS OPINIONS FORMED AS A RESULT OF OUR OBSERVATION OF FILL PLACEMENT AS WELL AS THE TESTS SHOWN ABOVE. WE HAVE RELIED UPON THE CONTRACTOR TO APPLY THE NECESSARY COMPACTIVE EFFORT AND MOISTURE TO ACHIEVE SPECIFIED COMPACTION DURING TIMES WHEN OUR OBSERVER IS NOT PRESENT, AND AT LOCATIONS OTHER THAN THOSE TESTED. TEST DATA ARE NOT THE SOLE BASIS FOR OPINIONS ON WHETHER THE FILL MEETS SPECIFICATIONS.

PROGRESS REPORT THE ABOVE TESTS WERE PERFORMED ON THE FOUNDATION WALL BACKFILL OF THE SPORTS FACILITY AND THE FILL PLACED FOR THE TRUCK RAMP ON THE NORTH SIDE OF THE WAREHOUSE.

☒ IN OUR OPINION, FILL COMPACTION MEETS SPECIFICATIONS AS INDICATED BY OUR OBSERVATIONS AND TEST NO.(S) 72-76

☐ IN OUR OPINION, FILL COMPACTION DOES NOT MEET SPECIFICATIONS AS INDICATED BY OUR OBSERVATIONS AND TEST NO.(S)

AND SHOULD BE REWORKED

SCOPE OF OBSERVATION: ☐ FULL TIME; ☒ PERIODIC, ON CALL BASIS; ☒ CONTRACTOR'S OR CLIENT'S REPRESENTATIVE ADVISED RON: REID BURTON CONSTRUCTION

CTL/THOMPSON, INC.

DELMAR FISCHER
FIELD REPRESENTATIVE

APPROVED BY

RONALD M. MC OMBER, P.E.

DF:PV

Compaction Test Report



CTL/THOMPSON, INC.
CONSULTING GEOTECHNICAL
AND MATERIALS ENGINEERS

1971 WEST 12TH AVE., DENVER, CO 80204
(303) 825-0777

CLIENT: **PEPSI COLA COMPANY**
3801 BRIGHTON BOULEVARD
DENVER, COLORADO 80216

ATTN: MR. DON PATTON

DATE: **3-27-86** JOB NO. **12532**
REPORT NO. **25** SHEET **1** OF **1**
SUBJECT

PEPSI COLA SPORTS FACILITY
3801 BRIGHTON BLVD.
FOUNDATION WALL BACKFILL

TEST NO.	LOCATION	DEPTH FEET *	TEST TYPE	LABORATORY		FIELD			SOIL TYPE
				MAX DENSITY PCF	OMC %	DRY DENSITY PCF	MC %	COM-PACTION %	
77	INTERIOR COLUMN LINE	0.0	NUC	130	7.5	125	6.8	97	CURVE #1
	C.5-1								JOB #11870
78	EXTERIOR COLUMN LINE	1.5	NUC	130	7.5	123	8.1	95	" "
	C.5-1								" "
79	INTERIOR COLUMN LINE	0.0	NUC	130	7.5	123	7.4	95	" "
	D.3-1								" "
*	BELOW GRADE								

SPECIFICATIONS: 95 % OF MAXIMUM ASTM D 1557
MOISTURE WITHIN + 3 % OF OPTIMUM

TYPE OF COMPACTION EQUIPMENT AND NO. OF UNITS:
(2) WHACKER TAMPERS

MOISTURE ADDED BY (1) WATER HOSE

THICKNESS OF LIFT 12 INCHES

TYPE OF EARTH MOVING EQUIPMENT AND NO. OF UNITS:
(1) LOADER

THIS REPORT PRESENTS OPINIONS FORMED AS A RESULT OF OUR OBSERVATION OF FILL PLACEMENT, AS WELL AS THE TESTS SHOWN ABOVE. WE HAVE RELIED UPON THE CONTRACTOR TO APPLY THE NECESSARY COMPACTIVE EFFORT AND MOISTURE TO ACHIEVE SPECIFIED COMPACTION DURING TIMES WHEN OUR OBSERVER IS NOT PRESENT, AND AT LOCATIONS OTHER THAN THOSE TESTED. TEST DATA ARE NOT THE SOLE BASIS FOR OPINIONS ON WHETHER THE FILL MEETS SPECIFICATIONS.

PROGRESS REPORT THE CONTRACTOR CONTINUES TO BACKFILL THE FOUNDATION WALL
ALONG COLUMN LINE 1 BETWEEN C AND E LINES.

☒ IN OUR OPINION, FILL COMPACTION MEETS SPECIFICATIONS AS INDICATED BY OUR OBSERVATIONS AND TEST NO.(S) 77-79

☐ IN OUR OPINION, FILL COMPACTION DOES NOT MEET SPECIFICATIONS AS INDICATED BY OUR OBSERVATIONS AND TEST NO.(S)
AND SHOULD BE REWORKED

SCOPE OF OBSERVATION: ☐ FULL TIME; ☒ PERIODIC, ON CALL BASIS; ☒ CONTRACTOR'S OR CLIENT'S REPRESENTATIVE ADVISED DARREL: REID
BURTON CONSTRUCTION

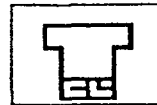
FIELD REPRESENTATIVE
DELMAR FISCHER

CTL/THOMPSON, INC.

APPROVED BY RONALD M. MC OMBER, P.E.

DF:PV

Compaction Test Report



CTL/THOMPSON, INC.
CONSULTING GEOTECHNICAL
AND MATERIALS ENGINEERS
1971 WEST 12TH AVE., DENVER, CO 80204
(303) 825-0777

CLIENT:

PEPSI COLA COMPANY
3801 BRIGHTON BOULEVARD
DENVER, COLORADO 80216

ATTN: MR. DON PATTON

DATE: 3-31-86 JOB NO. 12532
REPORT NO. 26 SHEET 1 OF 1
SUBJECT

PEPSI COLA SPORTS FACILITY
3801 BRIGHTON BOULEVARD
FOUNDATION WALL BACKFILL

TEST NO.	LOCATION	DEPTH FEET *	TEST TYPE	LABORATORY		FIELD			SOIL TYPE
				MAX DENSITY PCF	OMC %	DRY DENSITY PCF	MC %	COMPACTION %	
80	GRID LINE B.7-9 INTERIOR	0.0	NUC	126.5	10.0	121	5.3	96	CURVE #2
81	GRID LINE C.5-1 EXTERIOR	0.0	NUC	130	7.5	128	5.1	98	CURVE #1
82	GRID LINE G-10.5 INTERIOR	0.0	NUC	130	7.5	124	7.3	95	" "
83	GRID LINE G-10.5 EXTERIOR	0.0	NUC	130	7.5	123	5.7	95	" "
84	GRID LINE E.2-12 INTERIOR	2.7	NUC	130	7.5	124	8.8	95	" "
85	GRID LINE E.2-12 EXTERIOR	2.7	NUC	130	7.5	123	9.1	95	" "
	*BELOW GRADE								

SPECIFICATIONS: 95 % OF MAXIMUM ASTM D 1557
MOISTURE WITHIN ± 3 % OF OPTIMUM
TYPE OF COMPACTION EQUIPMENT AND NO. OF UNITS:

MOISTURE ADDED BY _____
THICKNESS OF LIFT _____ INCHES
TYPE OF EARTH MOVING EQUIPMENT AND NO. OF UNITS:

THIS REPORT PRESENTS OPINIONS FORMED AS A RESULT OF OUR OBSERVATION OF FILL PLACEMENT, AS WELL AS THE TESTS SHOWN ABOVE. WE HAVE RELIED UPON THE CONTRACTOR TO APPLY THE NECESSARY COMPACTIVE EFFORT AND MOISTURE TO ACHIEVE SPECIFIED COMPACTION DURING TIMES WHEN OUR OBSERVER IS NOT PRESENT, AND AT LOCATIONS OTHER THAN THOSE TESTED. TEST DATA ARE NOT THE SOLE BASIS FOR OPINIONS ON WHETHER THE FILL MEETS SPECIFICATIONS.

PROGRESS REPORT PRIOR TO OUR VISIT, THE CONTRACTOR COMPACTED FOUNDATION WALL BACKFILL IN THE ABOVE LOCATIONS.

☒ IN OUR OPINION, FILL COMPACTION MEETS SPECIFICATIONS AS INDICATED BY OUR OBSERVATIONS AND TEST NO.(S) 80-85
☐ IN OUR OPINION, FILL COMPACTION DOES NOT MEET SPECIFICATIONS AS INDICATED BY OUR OBSERVATIONS AND TEST NO.(S)
AND SHOULD BE REWORKED
SCOPE OF OBSERVATION: ☐ FULL TIME; ☒ PERIODIC, ON CALL BASIS; ☒ CONTRACTOR'S OR CLIENT'S REPRESENTATIVE ADVISED RON (REID BURTON)

DEL FISCHER

FIELD REPRESENTATIVE

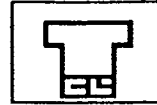
DF:DM

CTL/THOMPSON, INC.

APPROVED BY

RONALD M. MC OMBER, P. E.

Compaction Test Report



CTL/THOMPSON, INC.
CONSULTING GEOTECHNICAL
AND MATERIALS ENGINEERS

1971 WEST 12TH AVE., DENVER, CO 80204
(303) 825-0777

CLIENT: PEPSI COLA COMPANY
3801 BRIGHTON BOULEVARD
DENVER, COLORADO 80216

ATTN: MR. DON PATTON

DATE: 4-7-86 JOB NO. 12532
REPORT NO. 27 SHEET 1 OF 1
SUBJECT

PEPSI COLA SPORTS FACILITY
3801 BRIGHTON BOULEVARD
FOUNDATION WALL BACKFILL

TEST NO.	LOCATION	DEPTH FEET *	TEST TYPE	LABORATORY		FIELD			SOIL TYPE
				MAX DENSITY PCF	OMC %	DRY DENSITY PCF	MC %	COM-PACTION %	
86	GRID LINE C-8.5	5.0	NUC	130	7.5	125	10.3	96	CURVE #1 JOB #11870
87	GRID LINE B.7-8.5	10.5	NUC	130	7.5	123	10.3	95	" "
88	GRID LINE B.7-7.3	10.5	NUC	130	7.5	124	10.5	95	" "
89	GRID LINE B.7-8.5	7.0	NUC	130	7.5	128	8.5	98	" "
90	GRID LINE B.7-7.4	7.0	NUC	130	7.5	129	9.0	99	" "
91	GRID LINE C-8.6	2.5	NUC	130	7.5	129	9.9	99	" "
*	BELOW GRADE								

SPECIFICATIONS: 95 % OF MAXIMUM ASTM D 1557
MOISTURE WITHIN + 3 % OF OPTIMUM

TYPE OF COMPACTION EQUIPMENT AND NO. OF UNITS:

(2) WHACKER TAMPERS
(1) CAT 815 SHEEPSFOOT ROLLER

MOISTURE ADDED BY: NATURAL

THICKNESS OF LIFT: 12 INCHES

TYPE OF EARTH MOVING EQUIPMENT AND NO. OF UNITS:

(1) FRONT LOADER

THIS REPORT PRESENTS OPINIONS FORMED AS A RESULT OF OUR OBSERVATION OF FILL PLACEMENT, AS WELL AS THE TESTS SHOWN ABOVE. WE HAVE RELIED UPON THE CONTRACTOR TO APPLY THE NECESSARY COMPACTIVE EFFORT AND MOISTURE TO ACHIEVE SPECIFIED COMPACTION DURING TIMES WHEN OUR OBSERVER IS NOT PRESENT, AND AT LOCATIONS OTHER THAN THOSE TESTED. TEST DATA ARE NOT THE SOLE BASIS FOR OPINIONS ON WHETHER THE FILL MEETS SPECIFICATIONS.

PROGRESS REPORT DURING OUR TWO VISITS THE CONTRACTOR WAS BACKFILLING ALONG THE NORTH WEST BASEMENT FOUNDATION WALL. RON CARPENTER WAS INFORMED OUR FILL PLACEMENT OBSERVATION INDICATED A ZONE OF UNCOMPACTED FILL OCCURRING BETWEEN THE AREA WORKED BY THE 'WHACKER' TAMPERS AND THE SHEEPSFOOT ROLLER. RON WAS ADVISED TO REMOVE THIS MATERIAL TO NEAR THE BOTTOM OF THE WALL AND RECOMPACT. THIS ZONE IS LOCATED APPROXIMATELY 4 FEET FROM THE WALL AND EXTENDS ACROSS THE TEMPORARY RAMP WHICH IS BEING BACKFILLED AND COMPACTED WITH THE SHEEPSFOOT ROLLER.

☒ IN OUR OPINION, FILL COMPACTION MEETS SPECIFICATIONS AS INDICATED BY OUR OBSERVATIONS AND TEST NO.(S) 86-91

☐ IN OUR OPINION, FILL COMPACTION DOES NOT MEET SPECIFICATIONS AS INDICATED BY OUR OBSERVATIONS AND TEST NO.(S)

AND SHOULD BE REWORKED

SCOPE OF OBSERVATION: ☐ FULL TIME; ☒ PERIODIC, ON CALL BASIS; ☒ CONTRACTOR'S OR CLIENT'S REPRESENTATIVE ADVISED RON/REID BURTON

CTL/THOMPSON, INC.

DELMAR FISCHER

FIELD REPRESENTATIVE

APPROVED BY

RONALD M. MC OMBER, P.E.

DF:PV

Compaction Test Report



CTL/THOMPSON, INC.
CONSULTING GEOTECHNICAL
AND MATERIALS ENGINEERS

1971 WEST 12TH AVE., DENVER, CO 80204
(303) 825-0777

CLIENT: PEPSI COLA COMPANY
3801 BRIGHTON BOULEVARD
DENVER, COLORADO 80216

ATTN: MR. DON PATTON

DATE: 4-8-86 JOB NO. 12532
REPORT NO. 28 SHEET 1 OF 2
SUBJECT

PEPSI COLA SPORTS FACILITY
3801 BRIGHTON BOULEVARD
FOUNDATION WALL BACKFILL

TEST NO.	LOCATION	DEPTH FEET	TEST TYPE	LABORATORY		FIELD			SOIL TYPE
				MAX DENSITY PCF	OMC %	DRY DENSITY PCF	MC %	COMPACTION %	
		*		**					SAND-GRAVEL
92	GRID LINE B.6-8.2	4.5	NUC	117.0	13.5	113	17.1	97	V. CLAYEY
				**					
93	GRID LINE B.6-8.5	4.5	NUC	117.0	13.5	115	16.0	98	" "
									CURVE #1
94	GRID LINE B.6-6.9	4.5	NUC	128.5	9.5	126	9.7	98	JOB #12167
				**					SAND-GRAVEL
95	GRID LINE B.8-8.6	4.5	NUC	117.0	13.5	116	15.8	99	V. CLAYEY
				**					
92A	RETEST OF #92		NUC	117.0	13.5	115	16.2	98	" "
*	BELOW GRADE								
**	ESTIMATED BY A ONE-POINT								

SPECIFICATIONS: 98 % OF MAXIMUM ASTM D 698
MOISTURE WITHIN ± 3 % OF OPTIMUM

TYPE OF COMPACTION EQUIPMENT AND NO. OF UNITS:

(2) 'WHACKER' TAMPERS

(1) CAT 815 SHEEPSFOOT ROLLER

MOISTURE ADDED BY NATURAL

THICKNESS OF LIFT 12 INCHES

TYPE OF EARTH MOVING EQUIPMENT AND NO. OF UNITS:

(1) LOADER

THIS REPORT PRESENTS OPINIONS FORMED AS A RESULT OF OUR OBSERVATION OF FILL PLACEMENT AS WELL AS THE TESTS SHOWN ABOVE. WE HAVE RELIED UPON THE CONTRACTOR TO APPLY THE NECESSARY COMPACTIVE EFFORT AND MOISTURE TO ACHIEVE SPECIFIED COMPACTION DURING TIMES WHEN OUR OBSERVER IS NOT PRESENT, AND AT LOCATIONS OTHER THAN THOSE TESTED. TEST DATA ARE NOT THE SOLE BASIS FOR OPINIONS ON WHETHER THE FILL MEETS SPECIFICATIONS.

PROGRESS REPORT THE CONTRACTOR CONTINUES TO BACKFILL THE NORTH WEST BASEMENT WALL. RON CARPENTER INDICATED THE REMOVAL AND RECOMPACTION OF FILL AS SUGGESTED IN REPORT #27 WAS COMPLETED. THE FILL WAS REMOVED WITH A BACKHOE AND THE SHEEPSFOOT ROLLER WAS USED TO BACKFILL AND COMPACT THIS AREA. TEST #95 WAS PERFORMED IN THIS AREA. RON MC OMBER FROM OUR OFFICE, OBSERVED THE AREAS OF HAIRLINE CRACKS IN THE SLAB ALONG THE SOUTH WEST WALL OF THE BASEMENT. DURING OUR OBSERVATIONS AND DISCUSSION WITH RON CARPENTER IT WAS SUGGESTED SETTLEMENT MAY BE DUE TO EXCESSIVE WETTING OF THE CONT...

IN OUR OPINION, FILL COMPACTION MEETS SPECIFICATIONS AS INDICATED BY OUR OBSERVATIONS AND TEST NO.(S) 93-95, 92 A.

IN OUR OPINION, FILL COMPACTION DOES NOT MEET SPECIFICATIONS AS INDICATED BY OUR OBSERVATIONS AND TEST NO.(S)

AND SHOULD BE REWORKED

SCOPE OF OBSERVATION: ☐ FULL TIME; ☒ PERIODIC, ON CALL BASIS; ☒ CONTRACTOR'S OR CLIENT'S REPRESENTATIVE ADVISED RON/REID BURTON

DELMAR FISCHER

FIELD REPRESENTATIVE

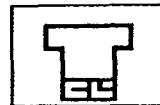
CTL/THOMPSON, INC.

APPROVED BY

RONALD M. MC OMBER, P.E.

F:PV

Compaction Test Report



CTL/THOMPSON, INC.
CONSULTING GEOTECHNICAL
AND MATERIALS ENGINEERS

1971 WEST 12TH AVE., DENVER, CO 80204
(303) 825-0777

CLIENT: PEPSI COLA COMPANY
3801 BRIGHTON BOULEVARD
DENVER, COLORADO 80216

ATTN: MR. DON PATTON

DATE: 4-8-86 JOB NO. 12532
REPORT NO. 28 SHEET 2 OF 2
SUBJECT

PEPSI COLA SPORTS FACILITY
3801 BRIGHTON BOULEVARD
FOUNDATION WALL BACKFILL

TEST NO.	LOCATION	DEPTH FEET	TEST TYPE	LABORATORY		FIELD			SOIL TYPE
				MAX DENSITY PCF	OMC %	DRY DENSITY PCF	MC %	COMPACTION %	

SPECIFICATIONS: _____ % OF MAXIMUM
MOISTURE WITHIN _____ % OF OPTIMUM

TYPE OF COMPACTION EQUIPMENT AND NO. OF UNITS:

MOISTURE ADDED BY _____

THICKNESS OF LIFT _____ INCHES

TYPE OF EARTH MOVING EQUIPMENT AND NO. OF UNITS:

THIS REPORT PRESENTS OPINIONS FORMED AS A RESULT OF OUR OBSERVATION OF FILL PLACEMENT, AS WELL AS THE TESTS SHOWN ABOVE. WE HAVE RELIED UPON THE CONTRACTOR TO APPLY THE NECESSARY COMPACTIVE EFFORT AND MOISTURE TO ACHIEVE SPECIFIED COMPACTION DURING TIMES WHEN OUR OBSERVER IS NOT PRESENT, AND AT LOCATIONS OTHER THAN THOSE TESTED. TEST DATA ARE NOT THE SOLE BASIS FOR OPINIONS ON WHETHER THE FILL MEETS SPECIFICATIONS.

PROGRESS REPORT ... BACKFILL SOILS FROM THE PREVIOUS SNOW IN A ZONE BETWEEN THE MACHINE COMPACTED FILL AND THE HAND COMPACTED FOUNDATION WALL BACKFILL. THE SLAB ALSO HAD ADDITIONAL LOADING FROM THE WEIGHT OF SITE CAST WALL PANELS. BACKFILL ADJACENT TO THE NORTHEAST BASEMENT HAD ALSO APPARENTLY SETTLED BUT NO SLAB WAS PRESENT. THE CRACKED SLAB SHOULD BE EVALUATED FURTHER AFTER THE WALL PANELS ARE REMOVED. ADDITIONAL FILL MAY BE REQUIRED ALONG THE NORTHEAST WALL PRIOR TO POURING SLABS.

☐ IN OUR OPINION, FILL COMPACTION MEETS SPECIFICATIONS AS INDICATED BY OUR OBSERVATIONS AND TEST NO.(S) .

☐ IN OUR OPINION, FILL COMPACTION DOES NOT MEET SPECIFICATIONS AS INDICATED BY OUR OBSERVATIONS AND TEST NO.(S) .

AND SHOULD BE REWORKED

SCOPE OF OBSERVATION: ☐ FULL TIME; ☐ PERIODIC, ON CALL BASIS; ☐ CONTRACTOR'S OR CLIENT'S REPRESENTATIVE ADVISED

CTL/THOMPSON, INC.

DELMAR FISCHER

FIELD REPRESENTATIVE

APPROVED BY

RONALD M. MC OMBER, P.E.

DF:Py

Compaction Test Report



CTL/THOMPSON, INC.
CONSULTING GEOTECHNICAL
AND MATERIALS ENGINEERS

1971 WEST 12TH AVE. DENVER, CO 80204
(303) 825-0777

CLIENT: PEPSI COLA COMPANY
3801 BRIGHTON BOULEVARD
DENVER, COLORADO 80216

ATTN: MR. DON PATTON

DATE: 7-29-86 JOB NO. 12532
REPORT NO. 29 SHEET 1 OF 1
SUBJECT

PEPSI COLA SPORTS FACILITY
3801 BRIGHTON BOULEVARD
SANITARY SEWER TRENCH BACKFILL

TEST NO.	LOCATION	DEPTH FEET *	TEST TYPE	LABORATORY		FIELD			SOIL TYPE
				MAX DENSITY PCF	OMC %	DRY DENSITY PCF	MC %	COM-PACTATION %	
96	SEWER TRENCH 80' WEST OF WAREHOUSE WALL	5.0	NUC	128.5	9.5	113	9.5	89	SAND, GRAVELLY SL. CLAYEY
97	SEWER TRENCH, 50' WEST OF WAREHOUSE WALL	5.0	NUC	128.5	9.5	114	6.0	89	" "
			SAND	128.5	9.5	118	5.6	92	" "
*	BELOW GRADE								
**	ESTIMATED BY A ONE-POINT								

SPECIFICATIONS: 95 % OF MAXIMUM ASTM D 1557
MOISTURE WITHIN ± 3 % OF OPTIMUM

TYPE OF COMPACTION EQUIPMENT AND NO. OF UNITS:

(1) VIBRATORY ROLLER

MOISTURE ADDED BY (1) HOSE

THICKNESS OF LIFT 12 INCHES

TYPE OF EARTH MOVING EQUIPMENT AND NO. OF UNITS:

(1) FRONT END LOADER

THIS REPORT PRESENTS OPINIONS FORMED AS A RESULT OF OUR OBSERVATION OF FILL PLACEMENT, AS WELL AS THE TESTS SHOWN ABOVE. WE HAVE RELIED UPON THE CONTRACTOR TO APPLY THE NECESSARY COMPACTIVE EFFORT AND MOISTURE TO ACHIEVE SPECIFIED COMPACTION DURING TIMES WHEN OUR OBSERVER IS NOT PRESENT, AND AT LOCATIONS OTHER THAN THOSE TESTED. TEST DATA ARE NOT THE SOLE BASIS FOR OPINIONS ON WHETHER THE FILL MEETS SPECIFICATIONS.

PROGRESS REPORT SITE WAS VISITED AT NOON TO TEST SANITARY SEWER TRENCH BACKFILL. THE CONTRACTOR WAS ADVISED TO INCREASE MOISTURE AND DECREASE LIFT THICKNESS TO MEET COMPACTION SPECIFICATIONS.

[] IN OUR OPINION, FILL COMPACTION MEETS SPECIFICATIONS AS INDICATED BY OUR OBSERVATIONS AND TEST NO.(S)

[X] IN OUR OPINION, FILL COMPACTION DOES NOT MEET SPECIFICATIONS AS INDICATED BY OUR OBSERVATIONS AND TEST NO.(S) 1, 2
AND SHOULD BE REWORKED

SCOPE OF OBSERVATION: [] FULL TIME; [X] PERIODIC, ON CALL BASIS; [X] CONTRACTOR'S OR CLIENT'S REPRESENTATIVE ADVISED

RON/BURTON
REID

CTL/THOMPSON, INC.

IAN SPLATT

FIELD REPRESENTATIVE

APPROVED BY

RONALD M. MC OMBER, P.E.

IS:PV

Compaction Test Report



CTL/THOMPSON, INC.
CONSULTING GEOTECHNICAL
AND MATERIALS ENGINEERS

1971 WEST 12TH AVE., DENVER, CO 80204
(303) 825-0777

CLIENT: PEPSI COLA COMPANY
3801 BRIGHTON BOULEVARD
DENVER, COLORADO 80216

ATTN: MR. DON PATTON

DATE: 7-30-86 JOB NO. 12532
REPORT NO. 30 SHEET 1 OF 1
SUBJECT

PEPSI COLA SPORTS FACILITY
3801 BRIGHTON BOULEVARD
SANITARY SEWER TRENCH BACKFILL

TEST NO.	LOCATION	DEPTH FEET *	TEST TYPE	LABORATORY		FIELD			SOIL TYPE
				MAX DENSITY PCF **	OMC %	DRY DENSITY PCF	MC %	COM-PACTION %	
97A	RETEST OF #97	5.0	NUC	128	9.5	115	6.8	90	SAND, GRAVELLY
98	60' WEST OF WAREHOUSE WALL	5.0	NUC	128	9.5	113	5.6	88	" "
96A	RETEST OF #96		NUC	128	9.5	112	8.6	88	" "
99	30' WEST OF OUTSIDE WAREHOUSE WALL	3.5	NUC	128	9.5	120	10.4	94	" "
100	75' WEST OF OUTSIDE WAREHOUSE WALL	4.5	NUC	128	9.5	115	10.4	90	" "
101	125' WEST OF OUTSIDE WAREHOUSE WALL	6.0	NUC	128	9.5	116	10.4	91	" "
102	ADJACENT TO MANHOLE	5.0	NUC	128	9.5	123	9.1	96	" "
103	INSIDE WAREHOUSE; 30'E OF INSIDE WALL	3.5	NUC	128	9.5	127	10.5	100	" "

* BELOW GRADE ** ESTIMATED BY A ONE-POINT

SPECIFICATIONS: 95 % OF MAXIMUM ASTM D 1557

MOISTURE WITHIN ± 3 % OF OPTIMUM

TYPE OF COMPACTION EQUIPMENT AND NO. OF UNITS:

(1) VIBRATORY ROLLER

(1) VIBRATORY TAMPER ON LOADER

MOISTURE ADDED BY (1) HOSE

THICKNESS OF LIFT 6-12 INCHES

TYPE OF EARTH MOVING EQUIPMENT AND NO. OF UNITS:

(2) LOADERS

THIS REPORT PRESENTS OPINIONS FORMED AS A RESULT OF OUR OBSERVATION OF FILL PLACEMENT, AS WELL AS THE TESTS SHOWN ABOVE. WE HAVE RELIED UPON THE CONTRACTOR TO APPLY THE NECESSARY COMPACTION EFFORT AND MOISTURE TO ACHIEVE SPECIFIED COMPACTION DURING TIMES WHEN OUR OBSERVER IS NOT PRESENT, AND AT LOCATIONS OTHER THAN THOSE TESTED. TEST DATA ARE NOT THE SOLE BASIS FOR OPINIONS ON WHETHER THE FILL MEETS SPECIFICATIONS.

PROGRESS REPORT FILL WAS OBSERVED DURING COMPACTION. THE CONTRACTOR WAS ADVISED TO INCREASE MOISTURE AND PLACE FILL IN THIN LIFTS.

[] IN OUR OPINION, FILL COMPACTION MEETS SPECIFICATIONS AS INDICATED BY OUR OBSERVATIONS AND TEST NO.(S) 102, 103
X) IN OUR OPINION, FILL COMPACTION DOES NOT MEET SPECIFICATIONS AS INDICATED BY OUR OBSERVATIONS AND TEST NO.(S) 99, 97A, 98, 96A, AND SHOULD BE REWORKED 100 AND 101
SCOPE OF OBSERVATION: [] FULL TIME; X) PERIODIC, ON CALL BASIS; X) CONTRACTOR'S OR CLIENT'S REPRESENTATIVE ADVISED RON/REID BURTON

IAN SPLATT

FIELD REPRESENTATIVE

IS:PV

CTL/THOMPSON, INC.

APPROVED BY

RONALD M. MC OMBER, P.E.

Compaction Test Report



CTL/THOMPSON, INC.
CONSULTING GEOTECHNICAL
AND MATERIALS ENGINEERS
1971 WEST 12TH AVE., DENVER, CO 80204
(303) 825-0777

CLIENT: PEPSI COLA COMPANY
3801 BRIGHTON BOULEVARD
DENVER, COLORADO 80216

ATTN: MR. DON PATTON

DATE: 7-31-86 JOB NO. 12532
REPORT NO. 31 SHEET 1 OF 1
SUBJECT

PEPSI COLA SPORTS FACILITY
3801 BRIGHTON BOULEVARD
SANITARY SEWER TRENCH BACKFILL

TEST NO.	LOCATION	DEPTH FEET *	TEST TYPE	LABORATORY		FIELD			SOIL TYPE
				MAX DENSITY PCF **	OMC %	DRY DENSITY PCF	MC %	COMPACTION %	
96B	RETEST OF #96 A		NUC	128	9.5	117	9.3	91	SAND, GRAVELLY
97B	RETEST OF #97 A		NUC	128	9.5	121	5.1	95	" "
98A	RETEST OF #98		NUC	128	9.5	122	5.0	95	" "
100A	RETEST OF #100		NUC	128	9.5	124	6.2	97	" "
101A	RETEST OF #101		NUC	128	9.5	122	5.6	95	" "
*	BELOW GRADE								
**	ESTIMATED BY A ONE-POINT								

SPECIFICATIONS: 95 % OF MAXIMUM ASTM D 1557

MOISTURE WITHIN + 3 % OF OPTIMUM

TYPE OF COMPACTION EQUIPMENT AND NO. OF UNITS:

(1) VIBRATORY ROLLER

(1) LOADER W/VIBRATORY TAMPER

MOISTURE ADDED BY (1) HOSE

THICKNESS OF LIFT 6-12 INCHES

TYPE OF EARTH MOVING EQUIPMENT AND NO. OF UNITS:

(2) FRONT-END LOADERS

THIS REPORT PRESENTS OPINIONS FORMED AS A RESULT OF OUR OBSERVATION OF FILL PLACEMENT, AS WELL AS THE TESTS SHOWN ABOVE. WE HAVE RELIED UPON THE CONTRACTOR TO APPLY THE NECESSARY COMPACTION EFFORT AND MOISTURE TO ACHIEVE SPECIFIED COMPACTION DURING TIMES WHEN OUR OBSERVER IS NOT PRESENT, AND AT LOCATIONS OTHER THAN THOSE TESTED. TEST DATA ARE NOT THE SOLE BASIS FOR OPINIONS ON WHETHER THE FILL MEETS SPECIFICATIONS.

PROGRESS REPORT THE CONTRACTOR INCREASED COMPACTION EFFORT THROUGHOUT TRENCH.

☐ IN OUR OPINION, FILL COMPACTION MEETS SPECIFICATIONS AS INDICATED BY OUR OBSERVATIONS AND TEST NO.(S) 97B, 98A, 100A, 101A

☒ IN OUR OPINION, FILL COMPACTION DOES NOT MEET SPECIFICATIONS AS INDICATED BY OUR OBSERVATIONS AND TEST NO.(S) 96B

AND SHOULD BE REWORKED

SCOPE OF OBSERVATION: ☐ FULL TIME; ☒ PERIODIC, ON CALL BASIS; ☒ CONTRACTOR'S OR CLIENT'S REPRESENTATIVE ADVISED RON W/REID BURTON

CTL/THOMPSON, INC.

IAN SPLATT

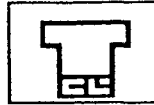
FIELD REPRESENTATIVE

APPROVED BY

RONALD M. MC OMBER, P.E.

IS:PV

Compaction Test Report



CTL/THOMPSON, INC.
CONSULTING GEOTECHNICAL
AND MATERIALS ENGINEERS

1971 WEST 12TH AVE., DENVER, CO 80204
(303) 825-0777

CLIENT: PEPSI COLA COMPANY
3801 BRIGHTON BOULEVARD
DENVER, COLORADO 80216

ATTN: MR. DON PATTON

DATE: 8-1-86 JOB NO. 12532
REPORT NO. 32 SHEET 1 OF 1
SUBJECT

PEPSI COLA SPORTS FACILITY
3801 BRIGHTON BOULEVARD
SANITARY SEWER TRENCH BACKFILL

TEST NO.	LOCATION	DEPTH FEET *	TEST TYPE	LABORATORY		FIELD			SOIL TYPE
				MAX DENSITY PCF **	OMC %	DRY DENSITY PCF	MC %	COM-PACTION %	
96C	RETEST OF #96		NUC	128	9.5	121	5.7	95	SAND, GRAVELLY
99A	RETEST OF #99		NUC	128	9.5	122	3.1	95	" "
104	50' WEST OF OUTSIDE WAREHOUSE WALL	2.5	NUC	128	9.5	121	3.9	95	" "
105	120' WEST OF OUTSIDE WAREHOUSE WALL	4.0	NUC	128	9.5	120	5.3	94	" "
106	INSIDE TRENCH; 6' EAST OF OUTSIDE WALL	1.0	NUC	128	9.5	120	5.4	94	" "
107	INSIDE TRENCH 20' EAST OF INSIDE WALL		NUC	128	9.5	123	7.0	95	" "
*	BELOW GRADE								
**	ESTIMATED BY A ONE-POINT								

SPECIFICATIONS: 95 % OF MAXIMUM ASTM D 1557
MOISTURE WITHIN ± 3 % OF OPTIMUM

TYPE OF COMPACTION EQUIPMENT AND NO. OF UNITS:

(1) VIBRATORY ROLLER

(1) LOADER W/TAMPER

MOISTURE ADDED BY (1) HOSE

THICKNESS OF LIFT 6-12 INCHES

TYPE OF EARTH MOVING EQUIPMENT AND NO. OF UNITS:

(2) FRONT END LOADERS

THIS REPORT PRESENTS OPINIONS FORMED AS A RESULT OF OUR OBSERVATION OF FILL PLACEMENT, AS WELL AS THE TESTS SHOWN ABOVE. WE HAVE RELIED UPON THE CONTRACTOR TO APPLY THE NECESSARY COMPACTION EFFORT AND MOISTURE TO ACHIEVE SPECIFIED COMPACTION DURING TIMES WHEN OUR OBSERVER IS NOT PRESENT, AND AT LOCATIONS OTHER THAN THOSE TESTED. TEST DATA ARE NOT THE SOLE BASIS FOR OPINIONS ON WHETHER THE FILL MEETS SPECIFICATIONS.

PROGRESS REPORT THE CONTRACTOR WAS ADVISED TO RECOMPACT THE AREAS OF TESTS #105 AND 106. NO RETESTS ARE NECESSARY. THE CONTRACTOR ADVISED OUR REPRESENTATIVE THAT IMPORTED FILL FROM MOBILE PREMIX WOULD BE USED FOR SEWER TRENCH BACKFILL, AND WOULD BEGIN BACKFILL ON MONDAY, AUGUST 3RD.

X) IN OUR OPINION, FILL COMPACTION MEETS SPECIFICATIONS AS INDICATED BY OUR OBSERVATIONS AND TEST NO.(S) 96C, 99A, 104-107

) IN OUR OPINION, FILL COMPACTION DOES NOT MEET SPECIFICATIONS AS INDICATED BY OUR OBSERVATIONS AND TEST NO.(S)

AND SHOULD BE REWORKED

SCOPE OF OBSERVATION:) FULL TIME; X PERIODIC, ON CALL BASIS; X) CONTRACTOR'S OR CLIENT'S REPRESENTATIVE ADVISED RON W/REID BURTON

CTL/THOMPSON, INC.

FIELD REPRESENTATIVE IAN SPLATT

APPROVED BY

RONALD M. MC OMBER, P.E.

IS:PV

Compaction Test Report



CTL/THOMPSON, INC.
CONSULTING GEOTECHNICAL
AND MATERIALS ENGINEERS

1971 WEST 12TH AVE., DENVER, CO 80204
(303) 825-0777

CLIENT: PEPSI COLA COMPANY
3801 BRIGHTON BOULEVARD
DENVER, COLORADO 80216

ATTN: MR. DON PATTON

DATE: 8-4-86 JOB NO. 12532

REPORT NO. 33 SHEET 1 OF 1

SUBJECT

PEPSI COLA SPORTS FACILITY
3801 BRIGHTON BOULEVARD
SANITARY SEWER TRENCH BACKFILL

TEST NO.	LOCATION	DEPTH FEET *	TEST TYPE	LABORATORY		FIELD			SOIL TYPE
				MAX DENSITY PCF **	OMC %	DRY DENSITY PCF	MC %	COM-PACTATION %	
108	80'W OF OUTSIDE WALL OF DELIVERY BUILDING	0.0	NUC	128	9.5	122	4.8	95	SAND, GRAVELLY
109	8'W OF OUTSIDE WALL OF DELIVERY BUILDING	0.0	NUC	128	9.5	125	6.0	98	SL. CLAYEY
110	120'W OF OUTSIDE WALL OF DELIVERY BUILDING	4.0	NUC	128	9.5	122	4.3	95	" "
111	100'W OF OUTSIDE WALL OF DELIVERY BUILDING	3.5	NUC	128	9.5	124	9.1	98	" "
112	200'W OF OUTSIDE WALL OF DELIVERY BUILDING	5.5	NUC	128	9.5	121	5.4	95	" "
113	25'W OF OUTSIDE WALL OF DELIVERY BUILDING	3.5	NUC	128	9.5	121	6.4	95	" "
114	SLAB ON GRADE AT STA. C-6	0.0	NUC	128	9.5	123	5.7	97	" "
*	BELOW GRADE								

** ESTIMATED BY A ONE-POINT

SPECIFICATIONS: 95 % OF MAXIMUM ASTM D 1557
MOISTURE WITHIN ± 3 % OF OPTIMUM

TYPE OF COMPACTION EQUIPMENT AND NO. OF UNITS:

(1) VIBRATORY ROLLER

(1) BACKHOE WITH TAMPER PLATE

MOISTURE ADDED BY (1) HOSE

THICKNESS OF LIFT 6-12 INCHES

TYPE OF EARTH MOVING EQUIPMENT AND NO. OF UNITS:

(2) FRONT END LOADERS

THIS REPORT PRESENTS OPINIONS FORMED AS A RESULT OF OUR OBSERVATION OF FILL PLACEMENT, AS WELL AS THE TESTS SHOWN ABOVE. WE HAVE RELIED UPON THE CONTRACTOR TO APPLY THE NECESSARY COMPACTION EFFORT AND MOISTURE TO ACHIEVE SPECIFIED COMPACTION DURING TIMES WHEN OUR OBSERVER IS NOT PRESENT, AND AT LOCATIONS OTHER THAN THOSE TESTED. TEST DATA ARE NOT THE SOLE BASIS FOR OPINIONS ON WHETHER THE FILL MEETS SPECIFICATIONS.

PROGRESS REPORT THE CONTRACTOR CONTINUED BACKFILLING THE SEWER TRENCH. THE CONTRACTOR WAS ADVISED TO INCREASE WATER CONTENT OF THE TRENCH BACKFILL.

☒ IN OUR OPINION, FILL COMPACTION MEETS SPECIFICATIONS AS INDICATED BY OUR OBSERVATIONS AND TEST NO.(S) 108-114

☐ IN OUR OPINION, FILL COMPACTION DOES NOT MEET SPECIFICATIONS AS INDICATED BY OUR OBSERVATIONS AND TEST NO.(S)

AND SHOULD BE REWORKED

SCOPE OF OBSERVATION: ☐ FULL TIME; ☒ PERIODIC, ON CALL BASIS; ☒ CONTRACTOR'S OR CLIENT'S REPRESENTATIVE ADVISED RON W/REID BURTON

IAN SPLATT

CTL/THOMPSON, INC.

FIELD REPRESENTATIVE

APPROVED BY

RONALD M. MC OMBER, P.E.

TS-PV

Compaction Test Report



CTL/THOMPSON, INC.
CONSULTING GEOTECHNICAL
AND MATERIALS ENGINEERS
1971 WEST 12TH AVE., DENVER, CO 80204
(303) 825-0777

CLIENT: PEPSI COLA COMPANY
3801 BRIGHTON BOULEVARD
DENVER, COLORADO 80216

ATTN: MR. DON PATTON

DATE: 8-5-86 JOB NO. 12532
REPORT NO. 34 SHEET 1 OF 1
SUBJECT

PEPSI COLA SPORTS FACILITY
3801 BRIGHTON BLVD.
SANITARY SEWER TRENCH BACKFILL

TEST NO.	LOCATION	DEPTH FEET	TEST TYPE	LABORATORY		FIELD			SOIL TYPE
				MAX DENSITY PCF	OMC %	DRY DENSITY PCF	MC %	COM-PACTION %	
	10'W OF OUTSIDE								SAND, GRAVELLY SL. CLAYEY DARK BROWN
115	DELIVERY WALL	2.0	NUC	128	9.5	121	6.8	95	
	180'W OF OUTSIDE								
116	DELIVERY WALL	4.0	NUC	128	9.5	121	6.2	95	" "
	165'W OF OUTSIDE								
117	DELIVERY WALL	2.5	NUC	128	9.5	120	4.9	94	" "
	120'W OF OUTSIDE								
118	DELIVERY WALL	2.0	NUC	128	9.5	121	8.3	95	" "
	100'W OF OUTSIDE								
119	DELIVERY WALL	0.5	NUC	128	9.5	122	8.7	96	" "
	140'W OF OUTSIDE								
120	DELIVERY WALL	1.0	NUC	128	9.5	121	6.5	95	" "
*	BELOW GRADE								
**	ESTIMATED BY A ONE-POINT								

SPECIFICATIONS: 95 % OF MAXIMUM ASTM D 1557

MOISTURE WITHIN ± 3 % OF OPTIMUM

TYPE OF COMPACTION EQUIPMENT AND NO. OF UNITS:

(2) VIBRATORY ROLLERS

(1) BACKHOE WITH TAMPER PLATE

MOISTURE ADDED BY (1) HOSE

THICKNESS OF LIFT 6-12 INCHES

TYPE OF EARTH MOVING EQUIPMENT AND NO. OF UNITS:

(2) BACKHOES/FRONT-END LOADERS

THIS REPORT PRESENTS OPINIONS FORMED AS A RESULT OF OUR OBSERVATION OF FILL PLACEMENT AS WELL AS THE TESTS SHOWN ABOVE. WE HAVE RELIED UPON THE CONTRACTOR TO APPLY THE NECESSARY COMPACTIVE EFFORT AND MOISTURE TO ACHIEVE SPECIFIED COMPACTION DURING TIMES WHEN OUR OBSERVER IS NOT PRESENT, AND AT LOCATIONS OTHER THAN THOSE TESTED. TEST DATA ARE NOT THE SOLE BASIS FOR OPINIONS ON WHETHER THE FILL MEETS SPECIFICATIONS.

PROGRESS REPORT THE CONTRACTOR CONTINUED SEWER TRENCH BACKFILL OPERATIONS.

☒ IN OUR OPINION, FILL COMPACTION MEETS SPECIFICATIONS AS INDICATED BY OUR OBSERVATIONS AND TEST NO.(S)

115-120

☐ IN OUR OPINION, FILL COMPACTION DOES NOT MEET SPECIFICATIONS AS INDICATED BY OUR OBSERVATIONS AND TEST NO.(S)

AND SHOULD BE REWORKED

SCOPE OF OBSERVATION: ☐ FULL TIME; ☒ PERIODIC, ON CALL BASIS; ☒ CONTRACTOR'S OR CLIENT'S REPRESENTATIVE ADVISED RON W/REID
BURTON

CTL/THOMPSON, INC.

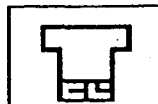
IAN SPLATT

FIELD REPRESENTATIVE

APPROVED BY

RONALD M. MC OMBER, P.E.

IS:PV



CTL/THOMPSON, INC.
CONSULTING GEOTECHNICAL
AND MATERIALS ENGINEERS

1971 WEST 12TH AVE., DENVER, CO 80204
(303) 825-0777

CLIENT: PEPSI COLA COMPANY
3801 BRIGHTON BOULEVARD
DENVER, COLORADO 80216

ATTN: MR. DON PATTON

DATE: 8-6-86 JOB NO. 12532

REPORT NO. 35 SHEET 1 OF 1

SUBJECT

PEPSI COLA SFORTS FACILITY
3801 BRIGHTON BLVD.
SANITARY SEWER TRENCH BACKFILL

TEST NO.	LOCATION	DEPTH FEET *	TEST TYPE	LABORATORY		FIELD			SOIL TYPE
				MAX DENSITY PCF	OMC %	DRY DENSITY PCF	MC %	COM-PACTION %	
121	160'W OF OUTSIDE DELIVERY WALL	0.0	NUC	128	9.5	123	8.2	97	SAND, GRAVELLY SL. CLAYEY DARK BROWN
122	200'W OF OUTSIDE DELIVERY WALL	0.0	NUC	128	9.5	121	6.1	95	" "
*	BELOW GRADE								
**	ESTIMATED BY A ONE-POINT								

SPECIFICATIONS: 95 % OF MAXIMUM ASTM D 1557
MOISTURE WITHIN + 3 % OF OPTIMUM

TYPE OF COMPACTION EQUIPMENT AND NO. OF UNITS:

(2) VIBRATORY ROLLERS

(1) BACKHOE W/TAMPER

MOISTURE ADDED BY (1) HOSE

THICKNESS OF LIFT 6-12 INCHES

TYPE OF EARTH MOVING EQUIPMENT AND NO. OF UNITS:

(2) FRONT END LOADERS

THIS REPORT PRESENTS OPINIONS FORMED AS A RESULT OF OUR OBSERVATION OF FILL PLACEMENT, AS WELL AS THE TESTS SHOWN ABOVE. WE HAVE RELIED UPON THE CONTRACTOR TO APPLY THE NECESSARY COMPACTIVE EFFORT AND MOISTURE TO ACHIEVE SPECIFIED COMPACTION DURING TIMES WHEN OUR OBSERVER IS NOT PRESENT, AND AT LOCATIONS OTHER THAN THOSE TESTED. TEST DATA ARE NOT THE SOLE BASIS FOR OPINIONS ON WHETHER THE FILL MEETS SPECIFICATIONS.

PROGRESS REPORT THE CONTRACTOR WAS ADVISED TO INCREASE MOISTURE CONTENT OF THE BACKFILL
IN THE UPPER PORTION OF THE TRENCH.

☒ IN OUR OPINION, FILL COMPACTION MEETS SPECIFICATIONS AS INDICATED BY OUR OBSERVATIONS AND TEST NO.(S) 121 AND 122

☐ IN OUR OPINION, FILL COMPACTION DOES NOT MEET SPECIFICATIONS AS INDICATED BY OUR OBSERVATIONS AND TEST NO.(S) _____

AND SHOULD BE REWORKED

SCOPE OF OBSERVATION: ☐ FULL TIME; ☒ PERIODIC, ON CALL BASIS; ☒ CONTRACTOR'S OR CLIENT'S REPRESENTATIVE ADVISED . RON W/REID
BURTON

CTL/THOMPSON, INC.

IAN SPLATT

FIELD REPRESENTATIVE

IS:PV

APPROVED BY

RONALD M. MC OMBER, P.E.

Compaction Test Report



CTL/THOMPSON, INC.
CONSULTING GEOTECHNICAL
AND MATERIALS ENGINEERS

1971 WEST 12TH AVE., DENVER, CO 80204
(303) 825-0777

CLIENT: PEPSI COLA COMPANY
3801 BRIGHTON BOULEVARD
DENVER, COLORADO 80216

ATTN: MR. DON PATTON

DATE: 8-7-86 JOB NO. 12532
REPORT NO. 36 SHEET 1 OF 1
SUBJECT

PEPSI COLA SPORTS FACILITY
3801 BRIGHTON BOULEVARD
SANITARY SEWER TRENCH BACKFILL

TEST NO.	LOCATION	DEPTH FEET *	TEST TYPE	LABORATORY		FIELD			SOIL TYPE
				MAX DENSITY PCF	OMC %	DRY DENSITY PCF	MC %	COMPACTION %	
123	120' W OF OUTSIDE DELIVERY WALL	0.0	NUC	128	9.5	122	6.5	96	SAND, GRAVELLY SL. CLAYEY DARK BROWN
124	140' W OF OUTSIDE DELIVERY WALL	0.0	NUC	128	9.5	121	8.2	95	
125	150' W OF OUTSIDE DELIVERY WALL	0.0	NUC	128	9.5	122	7.0	96	
*	BELOW GRADE								
**	ESTIMATED BY A ONE-POINT								

SPECIFICATIONS: 95 % OF MAXIMUM ASTM D 1557
MOISTURE WITHIN ± 2 % OF OPTIMUM

TYPE OF COMPACTION EQUIPMENT AND NO. OF UNITS:

(2) VIBRATORY ROLLERS

(1) BACKHOE W/TAMPER

MOISTURE ADDED BY (1) HOSE

THICKNESS OF LIFT 6-12 INCHES

TYPE OF EARTH MOVING EQUIPMENT AND NO. OF UNITS:

(2) FRONT END LOADERS

THIS REPORT PRESENTS OPINIONS FORMED AS A RESULT OF OUR OBSERVATION OF FILL PLACEMENT, AS WELL AS THE TESTS SHOWN ABOVE. WE HAVE RELIED UPON THE CONTRACTOR TO APPLY THE NECESSARY COMPACTIVE EFFORT AND MOISTURE TO ACHIEVE SPECIFIED COMPACTION DURING TIMES WHEN OUR OBSERVER IS NOT PRESENT, AND AT LOCATIONS OTHER THAN THOSE TESTED. TEST DATA ARE NOT THE SOLE BASIS FOR OPINIONS ON WHETHER THE FILL MEETS SPECIFICATIONS.

PROGRESS REPORT CONTRACTOR COMPLETED BACKFILLING OPERATIONS ALONG SEWER TRENCH. THIS COMPLETES TESTING ON SEWER TRENCH.

☒ IN OUR OPINION, FILL COMPACTION MEETS SPECIFICATIONS AS INDICATED BY OUR OBSERVATIONS AND TEST NO.(S) 123-125

☐ IN OUR OPINION, FILL COMPACTION DOES NOT MEET SPECIFICATIONS AS INDICATED BY OUR OBSERVATIONS AND TEST NO.(S)

AND SHOULD BE REWORKED

SCOPE OF OBSERVATION: ☐ FULL TIME; ☒ PERIODIC, ON CALL BASIS; ☒ CONTRACTOR'S OR CLIENT'S REPRESENTATIVE ADVISED RON W/ REID BURTON

IAN SPLATT

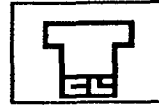
CTL/THOMPSON, INC.

FIELD REPRESENTATIVE

APPROVED BY

RONALD M. MC OMBER, P.E.

IS:PV



CTL/THOMPSON, INC.
CONSULTING GEOTECHNICAL
AND MATERIALS ENGINEERS

1971 WEST 12TH AVE. DENVER, CO 80204
(303) 825-0777

CLIENT:

PEPSI COLA COMPANY
3801 BRIGHTON BOULEVARD
DENVER, COLORADO 80216

ATTN: MR. DON PATTON

DATE: 9-30-86 JOB. NO. 12,532

REPORT NO. 37 SHEET 1 OF 1

SUBJECT

PEPSI COLA SPORTS FACILITY
3801 BRIGHTON BOULEVARD
BACKFILL, KITCHEN FOUNDATION WALL

TEST NO.	LOCATION	DEPTH FEET *	TEST TYPE	LABORATORY		FIELD			SOIL TYPE
				MAX DENSITY PCF	OMC %	DRY DENSITY PCF	MC %	COMPACTION %	
126	INSIDE KITCHEN WALL, 20'N.	6.5	NUC	122.0	11.3	116	10.0	95	CURVE #3
	OF MAIN BUILDING								JOB #11870
127	INSIDE KITCHEN WALL, 80'N.	6.0	NUC	122.0	11.3	114	7.6	93	"
	OF MAIN BUILDING								"
127A	RETEST OF #127		NUC	122.0	11.3	116	11.3	95	"
	*BELOW GRADE								

SPECIFICATIONS: 95 % OF MAXIMUM ASTM D 1557
MOISTURE WITHIN + 2 % OF OPTIMUM

TYPE OF COMPACTION EQUIPMENT AND NO. OF UNITS:

(1) VIBRATORY HAMMER

MOISTURE ADDED BY (1) HOSE

THICKNESS OF LIFT 6-8 INCHES

TYPE OF EARTH MOVING EQUIPMENT AND NO. OF UNITS:

(1) BOBCAT LOADER

THIS REPORT PRESENTS OPINIONS FORMED AS A RESULT OF OUR OBSERVATION OF FILL PLACEMENT, AS WELL AS THE TESTS SHOWN ABOVE. WE HAVE RELIED UPON THE CONTRACTOR TO APPLY THE NECESSARY COMPACTIVE EFFORT AND MOISTURE TO ACHIEVE SPECIFIED COMPACTION DURING TIMES WHEN OUR OBSERVER IS NOT PRESENT, AND AT LOCATIONS OTHER THAN THOSE TESTED. TEST DATA ARE NOT THE SOLE BASIS FOR OPINIONS ON WHETHER THE FILL MEETS SPECIFICATIONS.

PROGRESS REPORT THE CONTRACTOR WAS ADVISED TO INCREASE MOISTURE AND DECREASE LIFT
THICKNESS FROM 12 TO 6 OR 8 INCHES. TEST #127A WAS PERFORMED AFTER THE CONTRACTOR
DECREASED LIFT THICKNESS TO 6 INCHES.

☒ IN OUR OPINION, FILL COMPACTION MEETS SPECIFICATIONS AS INDICATED BY OUR OBSERVATIONS AND TEST NO.(S) 126, 127A

☐ IN OUR OPINION, FILL COMPACTION DOES NOT MEET SPECIFICATIONS AS INDICATED BY OUR OBSERVATIONS AND TEST NO.(S)

AND SHOULD BE REWORKED

SCOPE OF OBSERVATION: ☐ FULL TIME: ☒ PERIODIC, ON CALL BASIS: ☒ CONTRACTOR'S OR CLIENT'S REPRESENTATIVE ADVISED RON (REID BURTON)

CTL/THOMPSON INC.

IAN SPLATT
FIELD REPRESENTATIVE

APPROVED BY **MARC E. CLEVELAND, P. E.**

IS:DM



CTL/THOMPSON, INC.
CONSULTING GEOTECHNICAL
AND MATERIALS ENGINEERS

1971 WEST 12TH AVE., DENVER, CO 80204
(303) 825-0777

CLIENT:

PEPSI COLA COMPANY
3801 BRIGHTON BOULEVARD
DENVER, COLORADO 80216

ATTN: MR. DON PATTON

DATE: 10-1-86 JOB. NO. 12,532

REPORT NO. 38 SHEET 1 OF 1

SUBJECT
PEPSI COLA SPORTS FACILITY
3801 BRIGHTON BOULEVARD
FOUNDATION WALL BACKFILL

TEST NO.	LOCATION	DEPTH FEET *	TEST TYPE	LABORATORY		FIELD			SOIL TYPE
				MAX DENSITY PCF	OMC %	DRY DENSITY PCF	MC %	COM-PACTION %	
128	INSIDE KITCHEN WALL,	4.5	NUC	122.0	11.3	116	9.5	95	CURVE #3
	60'N. OF MAIN BUILDING								JOB #11870
129	OUTSIDE KITCHEN WALL	3.5	NUC	122.0	11.3	116	10.3	95	' '
	70'N. OF MAIN BUILDING								
	*BELOW GRADE								

SPECIFICATIONS: 95 % OF MAXIMUM ASTM D 1557
MOISTURE WITHIN + 2 % OF OPTIMUM

TYPE OF COMPACTION EQUIPMENT AND NO. OF UNITS:

(2) VIBRATORY TAMPERS

MOISTURE ADDED BY (1) HOSE

THICKNESS OF LIFT 6-8 INCHES

TYPE OF EARTH MOVING EQUIPMENT AND NO. OF UNITS:

(1) BOBCAT

THIS REPORT PRESENTS OPINIONS FORMED AS A RESULT OF OUR OBSERVATION OF FILL PLACEMENT, AS WELL AS THE TESTS SHOWN ABOVE. WE HAVE RELIED UPON THE CONTRACTOR TO APPLY THE NECESSARY COMPACTIVE EFFORT AND MOISTURE TO ACHIEVE SPECIFIED COMPACTION DURING TIMES WHEN OUR OBSERVER IS NOT PRESENT, AND AT LOCATIONS OTHER THAN THOSE TESTED. TEST DATA ARE NOT THE SOLE BASIS FOR OPINIONS ON WHETHER THE FILL MEETS SPECIFICATIONS.

PROGRESS REPORT THE CONTRACTOR CONTINUED KITCHEN FOUNDATION WALL BACKFILL. THE
CONTRACTOR WAS ADVISED TO INCREASE MOISTURE CONTENT.

☒ IN OUR OPINION, FILL COMPACTION MEETS SPECIFICATIONS AS INDICATED BY OUR OBSERVATIONS AND TEST NO.(S) 128, 129

☐ IN OUR OPINION, FILL COMPACTION DOES NOT MEET SPECIFICATIONS AS INDICATED BY OUR OBSERVATIONS AND TEST NO.(S) _____

AND SHOULD BE REWORKED

SCOPE OF OBSERVATION: ☐ FULL TIME; ☒ PERIODIC, ON CALL BASIS; ☒ CONTRACTOR'S OR CLIENT'S REPRESENTATIVE ADVISED RON (REID BURTON)

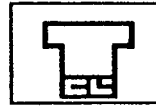
IAN SPLATT

FIELD REPRESENTATIVE

IS:DM

CTL/THOMPSON, INC.

APPROVED BY **MARC E. CLEVELAND, P. E.**



CTL/THOMPSON, INC.
CONSULTING GEOTECHNICAL
AND MATERIALS ENGINEERS

1971 WEST 12TH AVE., DENVER, CO 80204
(303) 825-0777

CLIENT:

PEPSI COLA COMPANY
3801 BRIGHTON BOULEVARD
DENVER, COLORADO 80216

ATTN: MR. DON PATTON

DATE: 10-2-86 JOB. NO. 12,532
REPORT NO. 39 SHEET 1 OF 1

SUBJECT
PEPSI COLA SPORTS FACILITY
3801 BRITHTON BOULEVARD
FOUNDATION WALL BACKFILL

TEST NO.	LOCATION	DEPTH FEET *	TEST TYPE	LABORATORY		FIELD			SOIL TYPE
				MAX DENSITY PCF	OMC %	DRY DENSITY PCF	MC %	COM-PACTION %	
130	OUTSIDE KITCHEN WALL,	1.0	NUC	128.5	9.5	125	8.3	** 97	CURVE #1
	80'N. OF MAIN BUILDING								JOB #12167
131	NEW BUILDING WALL,	0.5	NUC	122.0	11.3	117	10.5	96	CURVE #3
	20'N. OF LOADING BAY								JOB #11870
	*BELOW GRADE								
	**98% OF MAXIMUM ASTM D 698 IS REQUIRED								

SPECIFICATIONS: 95 % OF MAXIMUM ASTM D 1557
MOISTURE WITHIN ± 2 % OF OPTIMUM

TYPE OF COMPACTION EQUIPMENT AND NO. OF UNITS:
(2) VIBRATORY TAMPERS

MOISTURE ADDED BY (1) HOSE
THICKNESS OF LIFT 6-8 INCHES

TYPE OF EARTH MOVING EQUIPMENT AND NO. OF UNITS:
(1) BOBCAT

THIS REPORT PRESENTS OPINIONS FORMED AS A RESULT OF OUR OBSERVATION OF FILL PLACEMENT, AS WELL AS THE TESTS SHOWN ABOVE. WE HAVE RELIED UPON THE CONTRACTOR TO APPLY THE NECESSARY COMPACTIVE EFFORT AND MOISTURE TO ACHIEVE SPECIFIED COMPACTION DURING TIMES WHEN OUR OBSERVER IS NOT PRESENT, AND AT LOCATIONS OTHER THAN THOSE TESTED. TEST DATA ARE NOT THE SOLE BASIS FOR OPINIONS ON WHETHER THE FILL MEETS SPECIFICATIONS.

PROGRESS REPORT THE CONTRACTOR BEGAN EXCAVATING FILL INSIDE THE MAIN BUILDING. THE
CONTRACTOR SAID HE WOULD CONTACT US WHEN TESTS ARE NEEDED.

☒ IN OUR OPINION, FILL COMPACTION MEETS SPECIFICATIONS AS INDICATED BY OUR OBSERVATIONS AND TEST NO.(S) 130, 131

☐ IN OUR OPINION, FILL COMPACTION DOES NOT MEET SPECIFICATIONS AS INDICATED BY OUR OBSERVATIONS AND TEST NO.(S) _____

AND SHOULD BE REWORKED

SCOPE OF OBSERVATION: ☐ FULL TIME; ☒ PERIODIC, ON CALL BASIS; ☒ CONTRACTOR'S OR CLIENT'S REPRESENTATIVE ADVISED RON (REID BURTON)

CTL/THOMPSON, INC.

IAN SPLATT
FIELD REPRESENTATIVE

APPROVED BY **MARC E. CLEVELAND, P. E.**

IS:DM



CTL/THOMPSON, INC.
CONSULTING GEOTECHNICAL
AND MATERIALS ENGINEERS

1971 WEST 12TH AVE., DENVER, CO 80204
(303) 825-0777

CLIENT:

PEPSI COLA COMPANY
3801 BRIGHTON BOULEVARD
DENVER, COLORADO 80216

ATTN: MR. DON PATTON

DATE: 10-6-86 JOB NO. 12,532

REPORT NO. 40 SHEET 1 OF 1

SUBJECT

PEPSI COLA SPORTS FACILITY
3801 BRIGHTON BOULEVARD
BACKFILL

TEST NO.	LOCATION	DEPTH FEET *	TEST TYPE	LABORATORY		FIELD			SOIL TYPE
				MAX DENSITY PCF	OMC %	DRY DENSITY PCF	MC %	COMPACTION %	
	KITCHEN WALL, INSIDE								CURVE #3
132	30'N. OF MAIN BUILDING	3.0	NUC	122.0	11.3	116	11.2	95	JOB #11870
	KITCHEN WALL, OUTSIDE								" "
133	45'N. OF MAIN BUILDING	1.0	NUC	122.0	11.3	116	9.7	95	" "
	SLAB INSIDE MAIN SPORTS								" "
134	STRUCTURE, 40'W. OF	0.0	NUC	122.0	11.3	115	10.8	94	" "
	LOADING DOCK								
	*BELOW GRADE								

SPECIFICATIONS: 95 % OF MAXIMUM ASTM D 1557
MOISTURE WITHIN + 2 % OF OPTIMUM

TYPE OF COMPACTION EQUIPMENT AND NO. OF UNITS:

(2) VIBRATORY TAMPERS

MOISTURE ADDED BY (1) HOSE

THICKNESS OF LIFT 6-8 INCHES

TYPE OF EARTH MOVING EQUIPMENT AND NO. OF UNITS:

(1) BOBCAT

THIS REPORT PRESENTS OPINIONS FORMED AS A RESULT OF OUR OBSERVATION OF FILL PLACEMENT, AS WELL AS THE TESTS SHOWN ABOVE. WE HAVE RELIED UPON THE CONTRACTOR TO APPLY THE NECESSARY COMPACTIVE EFFORT AND MOISTURE TO ACHIEVE SPECIFIED COMPACTION DURING TIMES WHEN OUR OBSERVER IS NOT PRESENT, AND AT LOCATIONS OTHER THAN THOSE TESTED. TEST DATA ARE NOT THE SOLE BASIS FOR OPINIONS ON WHETHER THE FILL MEETS SPECIFICATIONS.

PROGRESS REPORT THE CONTRACTOR CONTINUED BACKFILLING ADJACENT TO THE KITCHEN
FOUNDATION WALL. A NEW SLAB WILL BE POURED INSIDE THE MAIN BUILDING WEST
OF THE LOADING DOCK. DUE TO FILL SETTLEMENT IN THE PREVIOUSLY EXISTING
CANAL, THE ORIGINAL SLAB CRACKED AND SETTLED. TEST 134 WAS TAKEN IN THE
RECOMPACTED FILL MATERIAL. THE CONTRACTOR WAS ADVISED TO RECOMPACT THE
ENTIRE SLAB SUBGRADE BASED ON RESULTS OF TEST 134. FURTHER TESTS ARE
SCHEDULED FOR TUESDAY, 10-7-86.

☒ IN OUR OPINION, FILL COMPACTION MEETS SPECIFICATIONS AS INDICATED BY OUR OBSERVATIONS AND TEST NO.(S) 132, 133

IN OUR OPINION, FILL COMPACTION DOES NOT MEET SPECIFICATIONS AS INDICATED BY OUR OBSERVATIONS AND TEST NO.(S) 134

AND SHOULD BE REWORKED

SCOPE OF OBSERVATION: ☐ FULL TIME; ☒ PERIODIC, ON CALL BASIS; ☒ CONTRACTOR'S OR CLIENT'S REPRESENTATIVE ADVISED RON (REID BURTON)

CTL/THOMPSON, INC.

IAN SPLATT
FIELD REPRESENTATIVE

APPROVED BY **MARC E. CLEVELAND, P. E.**

IS:DM



CTL/THOMPSON, INC.
CONSULTING GEOTECHNICAL
AND MATERIALS ENGINEERS

1971 WEST 12TH AVE., DENVER, CO 80204
(303) 825-0777

CLIENT:
PEPSI COLA COMPANY
3801 BRIGHTON BOULEVARD
DENVER, COLORADO 80216

ATTN: MR. DON PATTON

DATE: 10-7-86 JOB NO. 12,532

REPORT NO. 41 SHEET 1 OF 1

SUBJECT
PEPSI COLA SPORTS FACILITY
3801 BRIGHTON BOULEVARD
FOUNDATION WALL BACKFILL

TEST NO.	LOCATION	DEPTH FEET *	TEST TYPE	LABORATORY		FIELD			SOIL TYPE
				MAX DENSITY PCF	OMC %	DRY DENSITY PCF	MC %	COM-PACTION %	
135	KITCHEN WALL, INSIDE,	0.5	NUC	122.0	11.3	116	10.4	95	CURVE #3
	20'N. OF MAIN BLDG. WALL								JOB #11870
136	KITCHEN WALL, INSIDE,	0.5	NUC	122.0	11.3	118	10.9	97	" "
	80'N. OF MAIN BLDG. WALL								
	*BELOW GRADE								

SPECIFICATIONS: 95 % OF MAXIMUM ASTM D 1557
MOISTURE WITHIN + 2 % OF OPTIMUM

TYPE OF COMPACTION EQUIPMENT AND NO. OF UNITS:

(2) VIBRATORY TAMPERS

MOISTURE ADDED BY (1) HOSE

THICKNESS OF LIFT 6-8 INCHES

TYPE OF EARTH MOVING EQUIPMENT AND NO. OF UNITS:

(1) BOBCAT, (1) FRONT END LOADER

THIS REPORT PRESENTS OPINIONS FORMED AS A RESULT OF OUR OBSERVATION OF FILL PLACEMENT, AS WELL AS THE TESTS SHOWN ABOVE. WE HAVE RELIED UPON THE CONTRACTOR TO APPLY THE NECESSARY COMPACTIVE EFFORT AND MOISTURE TO ACHIEVE SPECIFIED COMPACTION DURING TIMES WHEN OUR OBSERVER IS NOT PRESENT, AND AT LOCATIONS OTHER THAN THOSE TESTED. TEST DATA ARE NOT THE SOLE BASIS FOR OPINIONS ON WHETHER THE FILL MEETS SPECIFICATIONS.

PROGRESS REPORT THE CONTRACTOR COMPLETED BACKFILLING ADJACENT TO THE KITCHEN FOUNDATION
WALL. THE SLAB SUBGRADE INSIDE THE MAIN SPORTS FACILITY BUILDING HAD NOT BEEN RE-
WORKED AND RECOMPACTED.

☒ IN OUR OPINION, FILL COMPACTION MEETS SPECIFICATIONS AS INDICATED BY OUR OBSERVATIONS AND TEST NO.(S) 135, 136.

☐ IN OUR OPINION, FILL COMPACTION DOES NOT MEET SPECIFICATIONS AS INDICATED BY OUR OBSERVATIONS AND TEST NO.(S)

AND SHOULD BE REWORKED

SCOPE OF OBSERVATION: ☐ FULL TIME; ☒ PERIODIC, ON CALL BASIS; ☒ CONTRACTOR'S OR CLIENT'S REPRESENTATIVE ADVISED RDN (REID BURTON)

CTL/THOMPSON, INC.

IAN SPLATT
FIELD REPRESENTATIVE

APPROVED BY **MARC E. CLEVELAND, P. E.**

IS:DM



CTL/THOMPSON, INC.
CONSULTING GEOTECHNICAL
AND MATERIALS ENGINEERS

1971 WEST 12TH AVE., DENVER, CO 80204
(303) 825-0777

CLIENT:

PEPSI COLA COMPANY
3801 BRIGHTON BOULEVARD
DENVER, COLORADO 80216

ATTN: MR. DON PATTON

DATE: 10-8-86 JOB. NO. 12,532
REPORT NO. 42 SHEET 1 OF 1

SUBJECT
PEPSI COLA SPORTS FACILITY
3801 BRIGHTON BOULEVARD
FOUNDATION WALL AND UNDER SLAB BACKFILL

TEST NO.	LOCATION	DEPTH FEET *	TEST TYPE	LABORATORY		FIELD			SOIL TYPE
				MAX DENSITY PCF	OMC %	DRY DENSITY PCF	MC %	COM-PACTION %	
137	AEROBICS ROOM, 10'S. OF N.W. CORNER (INSIDE)	1.5	NUC	122.0	11.3	118	10.6	97	CURVE #3
	JOB #11870								
138	AEROBICS ROOM, 30'S. OF N.W. CORNER (INSIDE)	1.0	NUC	122.0	11.3	116	10.6	95	" "
	JOB #11870								
139	SLAB, 20'W. OF LOADING DOCK	0.0	NUC	126.5	10.0	126	11.7	100	CURVE #2
	JOB #11870								
140	SLAB, 40'W. OF LOADING DOCK	0.0	NUC	126.5	10.0	124	10.4	98	" "
	JOB #11870								

SPECIFICATIONS: 95 % OF MAXIMUM ASTM D 1557
MOISTURE WITHIN + 2 % OF OPTIMUM

TYPE OF COMPACTION EQUIPMENT AND NO. OF UNITS:
(2) VIBRATORY TAMPERS

MOISTURE ADDED BY (1) HOSE
THICKNESS OF LIFT 6-8 INCHES

TYPE OF EARTH MOVING EQUIPMENT AND NO. OF UNITS:
(1) BOBCAT

THIS REPORT PRESENTS OPINIONS FORMED AS A RESULT OF OUR OBSERVATION OF FILL PLACEMENT, AS WELL AS THE TESTS SHOWN ABOVE. WE HAVE RELIED UPON THE CONTRACTOR TO APPLY THE NECESSARY COMPACTIVE EFFORT AND MOISTURE TO ACHIEVE SPECIFIED COMPACTION DURING TIMES WHEN OUR OBSERVER IS NOT PRESENT, AND AT LOCATIONS OTHER THAN THOSE TESTED. TEST DATA ARE NOT THE SOLE BASIS FOR OPINIONS ON WHETHER THE FILL MEETS SPECIFICATIONS.

PROGRESS REPORT THE SITE WAS VISITED IN THE MORNING AND AFTERNOON. THE CONTRACTOR
WAS ADVISED TO WATCH MOISTURE CONTENTS, EXPECIALLY IN THE SLAB AREA.

☒ IN OUR OPINION, FILL COMPACTION MEETS SPECIFICATIONS AS INDICATED BY OUR OBSERVATIONS AND TEST NO.(S) 137-140

☐ IN OUR OPINION, FILL COMPACTION DOES NOT MEET SPECIFICATIONS AS INDICATED BY OUR OBSERVATIONS AND TEST NO.(S) _____

AND SHOULD BE REWORKED

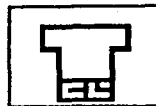
SCOPE OF OBSERVATION: ☐ FULL TIME: ☒ PERIODIC, ON CALL BASIS: ☒ CONTRACTOR'S OR CLIENT'S REPRESENTATIVE ADVISED RON (REID BURTON)

CTL/THOMPSON, INC.

IAN SPLATT
FIELD REPRESENTATIVE

APPROVED BY **MARC E. CLEVELAND, P. E.**

IS:DM



CTL/THOMPSON, INC.
CONSULTING GEOTECHNICAL
AND MATERIALS ENGINEERS

1971 WEST 12TH AVE., DENVER, CO 80204
(303) 825-0777

CLIENT:

PEPSI COLA COMPANY
3801 BRIGHTON BOULEVARD
DENVER, COLORADO 80216

ATTN: MR. DON PATTON

DATE: 10-9-86 JOB NO. 12,532

REPORT NO. 43 SHEET 1 OF 1

SUBJECT
PEPSI SPORTS FACILITY
3801 BRIGHTON BOULEVARD
FOUNDATION WALL BACKFILL

TEST NO.	LOCATION	DEPTH FEET *	TEST TYPE	LABORATORY		FIELD			SOIL TYPE
				MAX DENSITY PCF	OMC %	DRY DENSITY PCF	MC %	COM-PACTION %	
141	AEROBICS ROOM, INSIDE E. WALL, 30'S. OF N.E. COR.	1.0	NUC	126.5	10.0	123	9.6	97	CURVE #2
	JOB #11870								
142	LOCKER ROOM, OUTSIDE WALL 40'E. OF N.W. CORNER	0.5	NUC	126.5	10.0	125	8.6	99	" "
143	LOCKER ROOM, INSIDE WALL 70'E. OF N.W. CORNER	0.5	NUC	122.0	11.3	116	14.3	95	CURVE #3
	JOB #11870								
144	LOCKER ROOM, INSIDE WALL 20'E. OF N.W. CORNER	1.5	NUC	126.5	10.0	123	11.0	97	CURVE #2
	JOB #11870								

SPECIFICATIONS: 95 % OF MAXIMUM ASTM D 1557
MOISTURE WITHIN + 2 % OF OPTIMUM

TYPE OF COMPACTION EQUIPMENT AND NO. OF UNITS:

(2) VIBRATORY TAMPERS

MOISTURE ADDED BY (1) HOSE

THICKNESS OF LIFT 6-8 INCHES

TYPE OF EARTH MOVING EQUIPMENT AND NO. OF UNITS:

(1) BOBCAT

THIS REPORT PRESENTS OPINIONS FORMED AS A RESULT OF OUR OBSERVATION OF FILL PLACEMENT, AS WELL AS THE TESTS SHOWN ABOVE. WE HAVE RELIED UPON THE CONTRACTOR TO APPLY THE NECESSARY COMPACTIVE EFFORT AND MOISTURE TO ACHIEVE SPECIFIED COMPACTION DURING TIMES WHEN OUR OBSERVER IS NOT PRESENT, AND AT LOCATIONS OTHER THAN THOSE TESTED. TEST DATA ARE NOT THE SOLE BASIS FOR OPINIONS ON WHETHER THE FILL MEETS SPECIFICATIONS.

PROGRESS REPORT THE CONTRACTOR COMPLETED BACKFILLING AROUND BUILDING WALLS INSIDE AND OUT. FURTHER TESTS SHOULD BE REQUIRED TUESDAY, 10-14-86.

§ IN OUR OPINION, FILL COMPACTION MEETS SPECIFICATIONS AS INDICATED BY OUR OBSERVATIONS AND TEST NO.(S) 141-144

☐ IN OUR OPINION, FILL COMPACTION DOES NOT MEET SPECIFICATIONS AS INDICATED BY OUR OBSERVATIONS AND TEST NO.(S)

AND SHOULD BE REWORKED

SCOPE OF OBSERVATION: ☐ FULL TIME: ☒ PERIODIC, ON CALL BASIS: ☒ CONTRACTOR'S OR CLIENT'S REPRESENTATIVE ADVISED RON (REID BURTON)

CTL/THOMPSON, INC.

IAN SPLATT

FIELD REPRESENTATIVE

IS:DM

APPROVED BY **MARC E. CLEVELAND, P. E.**

Compaction Test Report



CTL/THOMPSON, INC.
CONSULTING GEOTECHNICAL
AND MATERIALS ENGINEERS

1971 WEST 12TH AVE., DENVER, CO 80204
(303) 825-0777

CLIENT: PEPSI COLA COMPANY
3801 BRIGHTON BOULEVARD
DENVER, COLORADO 80216

ATTN: MR. DON PATTON

DATE: 10-15-86 JOB NO. 12532
REPORT NO. 44 SHEET 1 OF 1
SUBJECT

PEPSI COLA SPORTS FACILITY
3801 BRIGHTON BOULEVARD
FOUNDATION WALL BACKFILL

TEST NO.	LOCATION	DEPTH FEET *	TEST TYPE	LABORATORY		FIELD			SOIL TYPE
				MAX DENSITY PCF	OMC %	DRY DENSITY PCF	MC %	COM-PACTATION %	
145	LOCKER ROOM - OUTSIDE WALL @ N.W. CORNER	0.0	NUC	126.5	10.0	122	9.2	96	CURVE #2 JOB #11870
146	PLANTER N.W. CORNER AEROBICS ROOM - EAST SIDE	0.5	NUC	126.5	10.0	120	8.5	95	" "
147	PLANTER N.W. CORNER AEROBICS ROOM - WEST SIDE	0.5	NUC	126.5	10.0	121	7.5	96	" "
148	S.W. CORNER AEROBICS ROOM OUTSIDE WALL	0.0	NUC	126.5	10.0	121	9.1	96	" "
149	S.W. CORNER AEROBICS ROOM OUTSIDE WALL	0.0	NUC	126.5	10.0	120	9.6	95	" "
150	S.W. CORNER AEROBICS ROOM INSIDE WALL	0.5	NUC	126.5	10.0	125	7.9	99	" "
151	S.W. CORNER AEROBICS ROOM INSIDE WALL	0.5	NUC	122.0	11.3	116	11.9	95	CURVE #3 JOB #11870
*	BELOW GRADE								

SPECIFICATIONS: 95 % OF MAXIMUM ASTM D 1557

MOISTURE WITHIN + 2 % OF OPTIMUM

TYPE OF COMPACTION EQUIPMENT AND NO. OF UNITS:

(2) VIBRATORY TAMPERS

MOISTURE ADDED BY (1) HOSE

THICKNESS OF LIFT 6-12 INCHES

TYPE OF EARTH MOVING EQUIPMENT AND NO. OF UNITS:

(1) BOBCAT

THIS REPORT PRESENTS OPINIONS FORMED AS A RESULT OF OUR OBSERVATION OF FILL PLACEMENT, AS WELL AS THE TESTS SHOWN ABOVE. WE HAVE RELIED UPON THE CONTRACTOR TO APPLY THE NECESSARY COMPACTION EFFORT AND MOISTURE TO ACHIEVE SPECIFIED COMPACTION DURING TIMES WHEN OUR OBSERVER IS NOT PRESENT, AND AT LOCATIONS OTHER THAN THOSE TESTED. TEST DATA ARE NOT THE SOLE BASIS FOR OPINIONS ON WHETHER THE FILL MEETS SPECIFICATIONS.

PROGRESS REPORT THE FOUNDATION WALL BACKFILL IN THE NEW SPORTS FACILITY WAS TESTED IN THE ABOVE LOCATIONS. THE CONTRACTOR WILL NOTIFY OUR OFFICE WHEN FURTHER BACKFILL TESTS ARE NECESSARY. THE CONTRACTOR WAS INFORMED OF THE LOW MOISTURE CONTENTS IN THE AREAS OF TESTS 147 AND 150.

☒ IN OUR OPINION, FILL COMPACTION MEETS SPECIFICATIONS AS INDICATED BY OUR OBSERVATIONS AND TEST NO.(S) 145-151

☐ IN OUR OPINION, FILL COMPACTION DOES NOT MEET SPECIFICATIONS AS INDICATED BY OUR OBSERVATIONS AND TEST NO.(S)

AND SHOULD BE REWORKED

SCOPE OF OBSERVATION: ☐ FULL TIME; ☒ PERIODIC, ON CALL BASIS; ☒ CONTRACTOR'S OR CLIENT'S REPRESENTATIVE ADVISED RON (REID BURTON)

CTL/THOMPSON, INC.

IAN SPLATT

FIELD REPRESENTATIVE

APPROVED BY

MARC E. CLEVELAND, P.E.

IS:PV

Compaction Test Report



CTL/THOMPSON, INC.
CONSULTING GEOTECHNICAL
AND MATERIALS ENGINEERS
1971 WEST 12TH AVE., DENVER, CO 80204
(303) 825-0777

CLIENT:

PEPSI COLA COMPANY
3801 BRIGHTON BOULEVARD
DENVER, COLORADO 80216

ATTN: MR. DON PATTON

DATE: 10-30-86 JOB NO. 12,532
REPORT NO. 45 SHEET 1 OF 1

SUBJECT
PEPSI COLA SPORTS FACILITY
3801 BRIGHTON BOULEVARD
UTILITY TRENCH BACKFILL

TEST NO.	LOCATION	DEPTH FEET *	TEST TYPE	LABORATORY		FIELD			SOIL TYPE
				MAX DENSITY PCF	OMC %	DRY DENSITY PCF	MC %	COMPACTION %	
152	E. PORTION OF KITCHEN AREA IN TRENCH	2.0	NUC	126.5	10.0	122	8.8	96	CURVE #2 JOB #11870
153	W. PORTION OF KITCHEN AREA IN TRENCH	1.0	NUC	130.0	7.5	129	6.5	99	CURVE #1 JOB #11870
154	5'E. OF TEST #153	1.0	NUC	126.5	10.0	119	7.2	94	CURVE #2 JOB #11870
155	AEROBICS ROOM IN THE N.E. CORNER	0.0	NUC	130.0	7.5	126	7.9	97	CURVE #1 JOB #11870
	*BELOW FINISH GRADE								

SPECIFICATIONS: 95 % OF MAXIMUM ASTM D 1557
MOISTURE WITHIN + 2 % OF OPTIMUM

TYPE OF COMPACTION EQUIPMENT AND NO. OF UNITS:

(2) VIBRATORY TAMPERS

MOISTURE ADDED BY (1) HOSE

THICKNESS OF LIFT 6 INCHES

TYPE OF EARTH MOVING EQUIPMENT AND NO. OF UNITS:

(1) BOBCAT

THIS REPORT PRESENTS OPINIONS FORMED AS A RESULT OF OUR OBSERVATION OF FILL PLACEMENT, AS WELL AS THE TESTS SHOWN ABOVE. WE HAVE RELIED UPON THE CONTRACTOR TO APPLY THE NECESSARY COMPACTIVE EFFORT AND MOISTURE TO ACHIEVE SPECIFIED COMPACTION DURING TIMES WHEN OUR OBSERVER IS NOT PRESENT, AND AT LOCATIONS OTHER THAN THOSE TESTED. TEST DATA ARE NOT THE SOLE BASIS FOR OPINIONS ON WHETHER THE FILL MEETS SPECIFICATIONS.

PROGRESS REPORT THE CONTRACTOR WAS ADVISED TO INCREASE MOISTURE IN NEWLY PLACED FILL (TEST 154) AND TO KEEP LIFT THICKNESS TO 6 INCHES. ADDITIONAL TESTS ARE SCHEDULED FOR FRIDAY, 10-31-86. THE AREA WAS RECOMPACTED AND NO RETEST WAS NECESSARY.

☒ IN OUR OPINION, FILL COMPACTION MEETS SPECIFICATIONS AS INDICATED BY OUR OBSERVATIONS AND TEST NO.(S) 152-155

☐ IN OUR OPINION, FILL COMPACTION DOES NOT MEET SPECIFICATIONS AS INDICATED BY OUR OBSERVATIONS AND TEST NO.(S) _____

AND SHOULD BE REWORKED

SCOPE OF OBSERVATION: ☐ FULL TIME; ☒ PERIODIC, ON CALL BASIS; ☒ CONTRACTOR'S OR CLIENT'S REPRESENTATIVE ADVISED RON (REID BURTON)

CTL/THOMPSON, INC.

IAN SPLATT
FIELD REPRESENTATIVE

APPROVED BY

MARC E. CLEVELAND, P. E.

IS:DM



CTL/THOMPSON, INC.
CONSULTING GEOTECHNICAL
AND MATERIALS ENGINEERS

1971 WEST 12TH AVE., DENVER, CO 80204
(303) 825-0777

CLIENT:

PEPSI COLA COMPANY
3801 BRIGHTON BOULEVARD
DENVER, COLORADO 80216

ATTN: MR. DON PATTON

DATE: 10-31-86 JOB NO. 12,532

REPORT NO. 46 SHEET 1 OF 1

SUBJECT
PEPSI COLA SPORTS FACILITY
3801 BRIGHTON BOULEVARD
UTILITY TRENCH BACKFILL

TEST NO.	LOCATION	DEPTH FEET *	TEST TYPE	LABORATORY		FIELD			SOIL TYPE
				MAX DENSITY PCF	OMC %	DRY DENSITY PCF	MC %	COM-PACTION %	
156	W. END OF TRENCH IN	0.0	NUC	126.5	10.0	121	7.7	96	CURVE #2
	KITCHEN AREA								JOB #11870
157	E. END OF TRENCH IN	0.0	NUC	126.5	10.0	122	5.1	96	
	KITCHEN AREA								
	*BELOW FINISH GRADE								

SPECIFICATIONS: 95 % OF MAXIMUM ASTM D 1557
MOISTURE WITHIN + 2 % OF OPTIMUM

TYPE OF COMPACTION EQUIPMENT AND NO. OF UNITS:

(2) VIBRATORY TAMPERS:

MOISTURE ADDED BY (1) HOSE

THICKNESS OF LIFT 6 INCHES

TYPE OF EARTH MOVING EQUIPMENT AND NO. OF UNITS:

(1) BOBCAT.

THIS REPORT PRESENTS OPINIONS FORMED AS A RESULT OF OUR OBSERVATION OF FILL PLACEMENT AS WELL AS THE TESTS SHOWN ABOVE. WE HAVE RELIED UPON THE CONTRACTOR TO APPLY THE NECESSARY COMPACTIVE EFFORT AND MOISTURE TO ACHIEVE SPECIFIED COMPACTION DURING TIMES WHEN OUR OBSERVER IS NOT PRESENT, AND AT LOCATIONS OTHER THAN THOSE TESTED. TEST DATA ARE NOT THE SOLE BASIS FOR OPINIONS ON WHETHER THE FILL MEETS SPECIFICATIONS.

PROGRESS REPORT THE CONTRACTOR WAS ADVISED TO INCREASE MOISTURE CONTENT IN THE AREA
OF TEST 157. THIS AREA WILL BE RETESTED MONDAY, 11-3-86.

☐ IN OUR OPINION, FILL COMPACTION MEETS SPECIFICATIONS AS INDICATED BY OUR OBSERVATIONS AND TEST NO.(S) 156

X) IN OUR OPINION, FILL COMPACTION DOES NOT MEET SPECIFICATIONS AS INDICATED BY OUR OBSERVATIONS AND TEST NO.(S) 157

AND SHOULD BE REWORKED

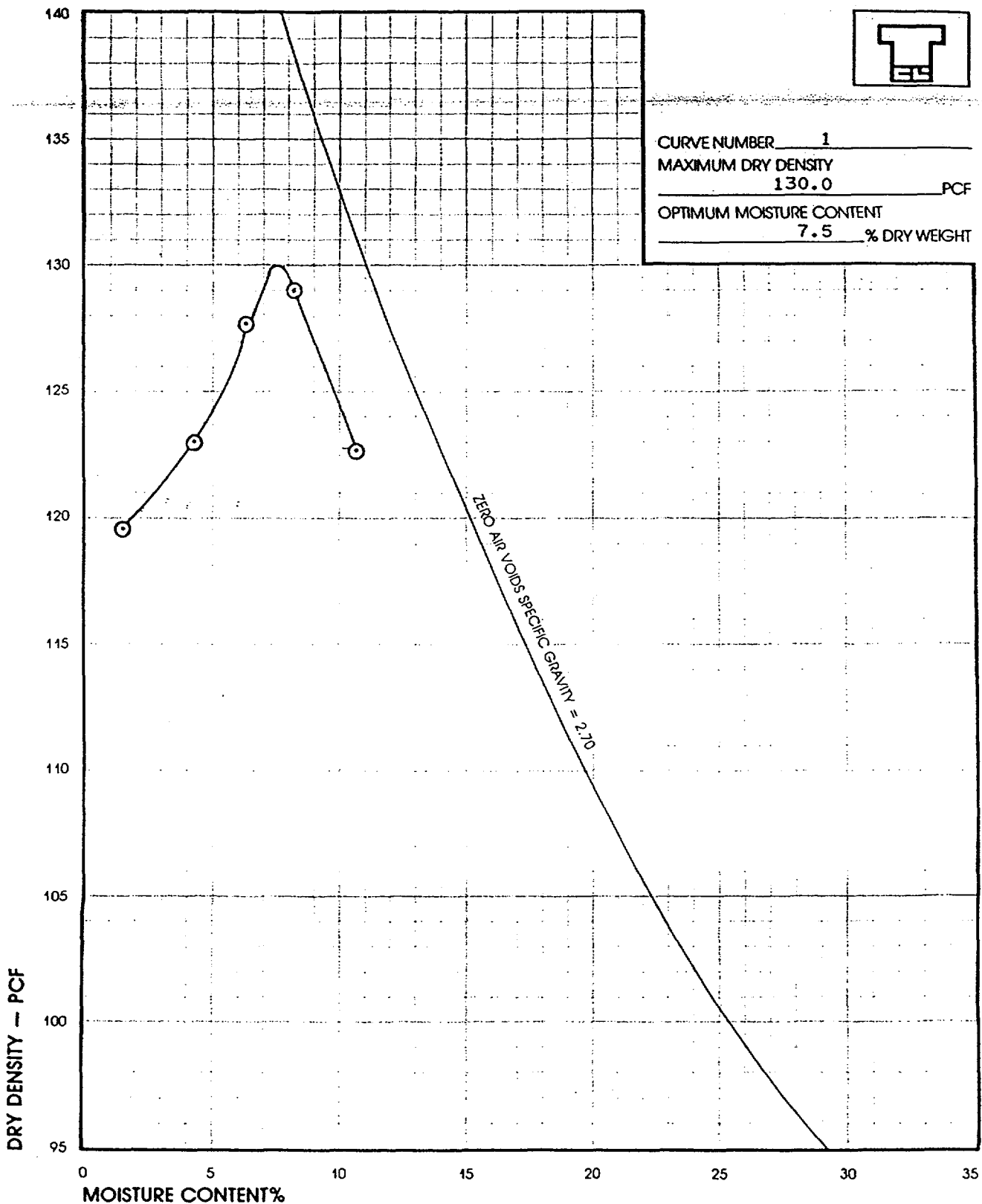
SCOPE OF OBSERVATION: ☐ FULL TIME; ☒ PERIODIC, ON CALL BASIS; ☒ CONTRACTOR'S OR CLIENT'S REPRESENTATIVE ADVISED RON (REID BURTON)

CTL/THOMPSON, INC.

IAN SPLATT
FIELD REPRESENTATIVE

APPROVED BY **MARC E. CLEVELAND, P. E.**

IS:DM



Sample Description SAND, SILTY, GRAVELLY, BROWN

Location PEPSI PLANT - ATHLETIC CENTER
ON SITE MATERIALS

Compaction Test Procedure ASTM D 1557-78
METHOD 'C'

LIQUID LIMIT _____ %
PLASTICITY INDEX _____ %
GRAVEL _____ %
SAND _____ %
SILT AND CLAY _____ %

Compaction Test Report



CTL/THOMPSON, INC.
CONSULTING GEOTECHNICAL
AND MATERIALS ENGINEERS

1971 WEST 12TH AVE., DENVER, CO 80204
(303) 825-0777

CLIENT: **PEPSI COLA COMPANY**
3801 BRIGHTON BOULEVARD
DENVER, COLORADO 80216

ATTN: MR. DON PATTON

DATE: 11/4/86 JOB NO. 12532
REPORT NO. 47 SHEET 1 OF 1
SUBJECT

PEPSI COLA SPORTS FACILITY
3801 BRIGHTON BOULEVARD
UTILITY TRENCH BACKFILL

TEST NO.	LOCATION	DEPTH FEET *	TEST TYPE	LABORATORY		FIELD			SOIL TYPE
				MAX DENSITY PCF	OMC %	DRY DENSITY PCF	MC %	COM-PACTION %	
158	ADJACENT PIPELINE AT NORTHERN END OF TRENCH	9.0	NUC	122.0	11.3	117	9.5	96	CURVE #3 JOB #11870
	15' WEST OF OUTSIDE KITCHEN WALL								
157A	RETEST OF #157		NUC	126.5	10.0	120	8.8	95	CURVE #2 JOB #11870
*	BELOW FINISHED GRADE								

SPECIFICATIONS: 95 % OF MAXIMUM ASTM D 1557
MOISTURE WITHIN ± 2 % OF OPTIMUM

TYPE OF COMPACTION EQUIPMENT AND NO. OF UNITS:

(2) VIBRATORY TAMPERS

MOISTURE ADDED BY (1) HOSE

THICKNESS OF LIFT 6-8 INCHES

TYPE OF EARTH MOVING EQUIPMENT AND NO. OF UNITS:

(1) BOBCAT

THIS REPORT PRESENTS OPINIONS FORMED AS A RESULT OF OUR OBSERVATION OF FILL PLACEMENT, AS WELL AS THE TESTS SHOWN ABOVE. WE HAVE RELIED UPON THE CONTRACTOR TO APPLY THE NECESSARY COMPACTIVE EFFORT AND MOISTURE TO ACHIEVE SPECIFIED COMPACTION DURING TIMES WHEN OUR OBSERVER IS NOT PRESENT, AND AT LOCATIONS OTHER THAN THOSE TESTED. TEST DATA ARE NOT THE SOLE BASIS FOR OPINIONS ON WHETHER THE FILL MEETS SPECIFICATIONS.

PROGRESS REPORT THE CONTRACTOR BEGAN PLACING AND COMPACTING BACKFILL IN THE NORTH - SOUTH SEWER TRENCH LOCATED APPROXIMATELY 15 FEET WEST OF THE OUTSIDE KITCHEN WALL. FURTHER TESTS WERE SCHEDULED FOR WEDNESDAY 11/5/86.

☒ IN OUR OPINION, FILL COMPACTION MEETS SPECIFICATIONS AS INDICATED BY OUR OBSERVATIONS AND TEST NO.(S) 158, 157A

☐ IN OUR OPINION, FILL COMPACTION DOES NOT MEET SPECIFICATIONS AS INDICATED BY OUR OBSERVATIONS AND TEST NO.(S)

AND SHOULD BE REWORKED

SCOPE OF OBSERVATION: ☐ FULL TIME; ☒ PERIODIC, ON CALL BASIS; ☒ CONTRACTOR'S OR CLIENT'S REPRESENTATIVE ADVISED RON (REID BURTON)

CTL THOMPSON, INC.

IAN SPLATT

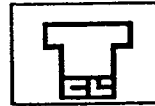
FIELD REPRESENTATIVE

APPROVED BY

MARC E. CLEVELAND, P.E.

IS:PV

Compaction Test Report



CTL/THOMPSON, INC.
CONSULTING GEOTECHNICAL
AND MATERIALS ENGINEERS
1971 WEST 12TH AVE., DENVER, CO 80204
(303) 825-0777

CLIENT:
PEPSI COLA COMPANY
3801 BRIGHTON BOULEVARD
DENVER, COLORADO 80216

ATTN: MR. DON PATTON

DATE: 11-5-86 JOB NO. 12,532
REPORT NO. 48 SHEET 1 OF 1
SUBJECT
PEPSI COLA SPORTS FACILITY
3801 BRIGHTON BOULEVARD
SANITARY SEWER TRENCH BACKFILL

TEST NO.	LOCATION	DEPTH FEET *	TEST TYPE	LABORATORY		FIELD			SOIL TYPE
				MAX DENSITY PCF	OMC %	DRY DENSITY PCF	MC %	COMPACTION %	
159	SEWER TRENCH	5.0	NUC	122.0	11.3	116	9.7	95	CURVE #3
	NORTH END								JOB #11870
160	SEWER TRENCH	6.0	NUC	122.0	11.3	118	9.6	97	" "
	SOUTH END								" "
161	SEWER TRENCH, SOUTH END,	3.0	NUC	122.0	11.3	120	9.7	98	" "
	ADJACENT TO MAIN BUILDING								" "
162	50' N. OF MAIN BUILDING	0.5	NUC	126.5	10.0	124	9.6	98	CURVE #2
									JOB #11870
	*BELOW FINISHED GRADE								

SPECIFICATIONS: 95 % OF MAXIMUM ASTM D 1557
MOISTURE WITHIN ± 2 % OF OPTIMUM

TYPE OF COMPACTION EQUIPMENT AND NO. OF UNITS:
(2) VIBRATORY TAMPERS

MOISTURE ADDED BY (1) HOSE
THICKNESS OF LIFT 6-8 INCHES

TYPE OF EARTH MOVING EQUIPMENT AND NO. OF UNITS:
(1) BOBCAT

THIS REPORT PRESENTS OPINIONS FORMED AS A RESULT OF OUR OBSERVATION OF FILL PLACEMENT, AS WELL AS THE TESTS SHOWN ABOVE. WE HAVE RELIED UPON THE CONTRACTOR TO APPLY THE NECESSARY COMPACTION EFFORT AND MOISTURE TO ACHIEVE SPECIFIED COMPACTION DURING TIMES WHEN OUR OBSERVER IS NOT PRESENT, AND AT LOCATIONS OTHER THAN THOSE TESTED. TEST DATA ARE NOT THE SOLE BASIS FOR OPINIONS ON WHETHER THE FILL MEETS SPECIFICATIONS.

PROGRESS REPORT THE CONTRACTOR CONTINUED TRENCH BACKFILL IN THE SANITARY SEWER TRENCH.
WE ADVISED THE CONTRACTOR TO INCREASE THE WATER CONTENT IN THE FILL AND TO
DECREASE LIFT SIZE TO 6 TO 8 INCHES MAXIMUM.

☒ IN OUR OPINION, FILL COMPACTION MEETS SPECIFICATIONS AS INDICATED BY OUR OBSERVATIONS AND TEST NO.(S) 159-162
☐ IN OUR OPINION, FILL COMPACTION DOES NOT MEET SPECIFICATIONS AS INDICATED BY OUR OBSERVATIONS AND TEST NO.(S) _____
AND SHOULD BE REWORKED
SCOPE OF OBSERVATION: ☐ FULL TIME; ☒ PERIODIC, ON CALL BASIS; ☒ CONTRACTOR'S OR CLIENT'S REPRESENTATIVE ADVISED RON (REID BURTON)

IAN SPLATT
FIELD REPRESENTATIVE

IS:DM

CTL/THOMPSON, INC.

APPROVED BY MARC E. CLEVELAND, P. E.

Compaction Test Report



CTL/THOMPSON, INC.
CONSULTING GEOTECHNICAL
AND MATERIALS ENGINEERS

1971 WEST 12TH AVE., DENVER, CO 80204
(303) 825-0777

CLIENT:
PEPSI COLA COMPANY
3801 BRIGHTON BOULEVARD
DENVER, COLORADO 80216

ATTN: MR. DON PATTON

DATE: 11-7-86 JOB NO. 12,532
REPORT NO. 49 SHEET 1 OF 1

SUBJECT
PEPSI COLA SPORTS FACILITY
3801 BRIGHTON BOULEVARD
UTILITY TRENCH BACKFILL

TEST NO.	LOCATION	DEPTH FEET *	TEST TYPE	LABORATORY		FIELD			SOIL TYPE
				MAX DENSITY PCF	OMC %	DRY DENSITY PCF	MC %	COMPACTION %	
163	20'W. OF GYMNASIUM IN ADJACENT TRENCH	6.0	NJC	122.0	11.3	117	11.0	96	CURVE #3 JOB #11870
164	30'N. OF MAIN BUILDING IN MAIN TRENCH	1.0	NJC	122.0	11.3	118	11.1	97	" "
165	ELECTRICAL TRENCH, E. OF NEW SPORTS BLDG. E. TRENCH	0.0	NJC	122.0	11.3	115	12.2	94	" "
166	ELECTRICAL TRENCH, E. OF NEW SPORTS BLDG., CENTRAL TRENCH	0.0	NJC	130.0	7.5	128	9.9	99	CURVE #1 JOB #11870
167	ELECTRICAL TRENCH, E. OF NEW SPORTS BLDG., N. TRENCH	0.0	NJC	122.0	11.3	114	13.9	93	CURVE #3 JOB #11870
	*BELOW FINISH GRADE								

SPECIFICATIONS: 95 % OF MAXIMUM ASTM D 1557

MOISTURE WITHIN ± 2 % OF OPTIMUM

TYPE OF COMPACTION EQUIPMENT AND NO. OF UNITS:

(2) VIBRATORY TAMPERS

MOISTURE ADDED BY (1) HOSE

THICKNESS OF LIFT 12 INCHES

TYPE OF EARTH MOVING EQUIPMENT AND NO. OF UNITS:

(1) BOBCAT

THIS REPORT PRESENTS OPINIONS FORMED AS A RESULT OF OUR OBSERVATION OF FILL PLACEMENT, AS WELL AS THE TESTS SHOWN ABOVE. WE HAVE RELIED UPON THE CONTRACTOR TO APPLY THE NECESSARY COMPACTION EFFORT AND MOISTURE TO ACHIEVE SPECIFIED COMPACTION DURING TIMES WHEN OUR OBSERVER IS NOT PRESENT, AND AT LOCATIONS OTHER THAN THOSE TESTED. TEST DATA ARE NOT THE SOLE BASIS FOR OPINIONS ON WHETHER THE FILL MEETS SPECIFICATIONS.

PROGRESS REPORT THE CONTRACTOR WAS INFORMED OF THE HIGH MOISTURE CONTENTS IN THE BACK-FILL OF THE ELECTRICAL TRENCH. WE ADVISED THE CONTRACTOR TO AIR DRY THE SOILS, AND RECOMPACT.

☐ IN OUR OPINION, FILL COMPACTION MEETS SPECIFICATIONS AS INDICATED BY OUR OBSERVATIONS AND TEST NO.(S) 163-166

☒ IN OUR OPINION, FILL COMPACTION DOES NOT MEET SPECIFICATIONS AS INDICATED BY OUR OBSERVATIONS AND TEST NO.(S) 167

AND SHOULD BE REWORKED

SCOPE OF OBSERVATION: ☐ FULL TIME; ☒ PERIODIC, ON CALL BASIS; ☒ CONTRACTOR'S OR CLIENT'S REPRESENTATIVE ADVISED RON (REID BURTON)

IAN SPLATT
FIELD REPRESENTATIVE

CTL/THOMPSON, INC.

APPROVED BY MARC E. CLEVELAND, P. E.

IS:DM



CTL/THOMPSON, INC.
CONSULTING GEOTECHNICAL
AND MATERIALS ENGINEERS

1971 WEST 12TH AVE., DENVER, CO 80204
(303) 825-0777

CLIENT:
PEPSI COLA COMPANY
3801 BRIGHTON BOULEVARD
DENVER, COLORADO 80216

ATTN: MR. DON PATTON

DATE: 11-11-86 JOB NO. 12,532
REPORT NO. 50 SHEET 1 OF 1

SUBJECT
PEPSI COLA SPORTS FACILITY
3801 BRIGHTON BOULEVARD
UTILITY TRENCH BACKFILL

TEST NO.	LOCATION	DEPTH FEET *	TEST TYPE	LABORATORY		FIELD			SOIL TYPE
				MAX DENSITY PCF	OMC %	DRY DENSITY PCF	MC %	COM-PACTION %	
167A	RETEST OF #167		NUC	126.5	10.0	123	8.1	97	CURVE #2
	ELECTRICAL TRENCH, 60'W. OF 38TH AVENUE								JOB #11870
168	ELECTRICAL TRENCH, ADJ. TO 38TH AVENUE, N. END	0.0	NUC	130.0	7.5	129	6.7	99	CURVE #1
									JOB #11870
169	ELECTRICAL TRENCH, ADJ. TO 38TH AVENUE, N. END	0.0	NUC	126.0	10.0	121	9.2	96	CURVE #2
									JOB #11870
	*BELOW GRADE								

SPECIFICATIONS: 95 % OF MAXIMUM ASTM D 1557
MOISTURE WITHIN ± 2 % OF OPTIMUM

TYPE OF COMPACTION EQUIPMENT AND NO. OF UNITS:

(1) BACKHOE WITH VIBRATORY TAMPER

MOISTURE ADDED BY ---

THICKNESS OF LIFT 12 INCHES

TYPE OF EARTH MOVING EQUIPMENT AND NO. OF UNITS:

(1) BACKHOE

THIS REPORT PRESENTS OPINIONS FORMED AS A RESULT OF OUR OBSERVATION OF FILL PLACEMENT, AS WELL AS THE TESTS SHOWN ABOVE. WE HAVE RELIED UPON THE CONTRACTOR TO APPLY THE NECESSARY COMPACTIVE EFFORT AND MOISTURE TO ACHIEVE SPECIFIED COMPACTION DURING TIMES WHEN OUR OBSERVER IS NOT PRESENT, AND AT LOCATIONS OTHER THAN THOSE TESTED. TEST DATA ARE NOT THE SOLE BASIS FOR OPINIONS ON WHETHER THE FILL MEETS SPECIFICATIONS.

PROGRESS REPORT BACKFILL IN THE ELECTRICAL TRENCH WAS COMPACTED AFTER THE SOILS
WERE ALLOWED TO DRY. FURTHER TESTS WERE SCHEDULED FOR THURSDAY, 11-13-86.

X1 IN OUR OPINION, FILL COMPACTION MEETS SPECIFICATIONS AS INDICATED BY OUR OBSERVATIONS AND TEST NO.(S) 167A, 168, 169

IN OUR OPINION, FILL COMPACTION DOES NOT MEET SPECIFICATIONS AS INDICATED BY OUR OBSERVATIONS AND TEST NO. (S) _____

AND SHOULD BE REWORKED

SCOPE OF OBSERVATION: ☐ FULL TIME: ☒ PERIODIC, ON CALL BASIS: ☒ CONTRACTOR'S OR CLIENT'S REPRESENTATIVE ADVISED RON (REID BURTON)

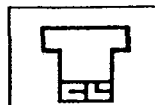
CTL/THOMPSON, INC.

IAN SPLATT
FIELD REPRESENTATIVE

APPROVED BY MARC E. CLEVELAND, P. E.

IS:DM

Compaction Test Report



CTL/THOMPSON, INC.
CONSULTING GEOTECHNICAL
AND MATERIALS ENGINEERS
1971 WEST 12TH AVE., DENVER, CO 80204
(303) 825-0777

CLIENT: PEPSI COLA COMPANY
3801 BRIGHTON BOULEVARD
DENVER, COLORADO 80216

ATTN: MR. DON PATTON

DATE: 11-20-86 JOB NO. 12532
REPORT NO. 55 SHEET 1 OF 1
SUBJECT

PEPSI COLA SPORTS FACILITY
3801 BRIGHTON BOULEVARD
RAMP AND WALL BACKFILL

TEST NO.	LOCATION	DEPTH FEET *	TEST TYPE	LABORATORY		FIELD			SOIL TYPE
				MAX DENSITY PCF	OMC %	DRY DENSITY PCF	MC %	COMPACTION %	
177	MAIN BUILDING WALL, SOUTH OF KITCHEN RAMP	0.0	NUC	130	7.5	128	8.7	99	CURVE #1 JOB #11870
178	WALL, EAST OF KITCHEN RAMP	0.0	NUC	130	7.5	127	10.7	98	" "
179	MIDDLE OF KITCHEN RAMP	0.0	NUC	130	7.5	123	9.8	95	" "
180	WALL ON WEST SIDE OF KITCHEN RAMP	0.0	NUC	130	7.5	130	9.1	100	CURVE #1 JOB #11870
*	BELOW FINISHED GRADE								

SPECIFICATIONS: 95 % OF MAXIMUM ASTM D 1557
MOISTURE WITHIN ± 2 % OF OPTIMUM

TYPE OF COMPACTION EQUIPMENT AND NO. OF UNITS:
(2) VIBRATORY TAMPERS

MOISTURE ADDED BY ---
THICKNESS OF LIFT 6 INCHES

TYPE OF EARTH MOVING EQUIPMENT AND NO. OF UNITS:
(1) BOBCAT

THIS REPORT PRESENTS OPINIONS FORMED AS A RESULT OF OUR OBSERVATION OF FILL PLACEMENT, AS WELL AS THE TESTS SHOWN ABOVE. WE HAVE RELIED UPON THE CONTRACTOR TO APPLY THE NECESSARY COMPACTIVE EFFORT AND MOISTURE TO ACHIEVE SPECIFIED COMPACTION DURING TIMES WHEN OUR OBSERVER IS NOT PRESENT, AND AT LOCATIONS OTHER THAN THOSE TESTED. TEST DATA ARE NOT THE SOLE BASIS FOR OPINIONS ON WHETHER THE FILL MEETS SPECIFICATIONS.

PROGRESS REPORT THE CONTRACTOR WAS INFORMED OF THE MOISTURE CONTENT ABOVE THE SPECIFIED ± 2 PERCENT AS TESTS 178 AND 179.

X IN OUR OPINION, FILL COMPACTION MEETS SPECIFICATIONS AS INDICATED BY OUR OBSERVATIONS AND TEST NO.(S) 177-180

I IN OUR OPINION, FILL COMPACTION DOES NOT MEET SPECIFICATIONS AS INDICATED BY OUR OBSERVATIONS AND TEST NO.(S)

AND SHOULD BE REWORKED

SCOPE OF OBSERVATION: FULL TIME; X PERIODIC, ON CALL BASIS; X CONTRACTOR'S OR CLIENT'S REPRESENTATIVE ADVISED SUPERVISOR (REID BURTON)

CTL/THOMPSON, INC.

FIELD REPRESENTATIVE IAN SPLATT

APPROVED BY

MARC E. CLEVELAND, P.E.

IS:PV



CTL/THOMPSON, INC.
CONSULTING GEOTECHNICAL
AND MATERIALS ENGINEERS

1971 WEST 12TH AVE., DENVER, CO 80204
(303) 825-0777

CLIENT: PEPSI COLA COMPANY
3801 BRIGHTON BOULEVARD
DENVER, COLORADO 80216

ATTN: MR. DON PATTON

DATE: 11-19-86 JOB. NO. 12532

REPORT NO. 54 SHEET 1 OF 1

SUBJECT

PEPSI COLA SPORTS FACILITY
3801 BRIGHTON BOULEVARD
RAMP AND WALL BACKFILL

[illegible]

SPECIFICATIONS: 95 % OF MAXIMUM ASTM D 1557

MOISTURE WITHIN + 2 % OF OPTIMUM

TYPE OF COMPACTION EQUIPMENT AND NO. OF UNITS:

(2) VIBRATORY TAMPERS

MOISTURE ADDED BY _____

THICKNESS OF LIFT 6 INCHES

TYPE OF EARTH MOVING EQUIPMENT AND NO. OF UNITS:

(1) BOBCAT

THIS REPORT PRESENTS OPINIONS FORMED AS A RESULT OF OUR OBSERVATION OF FILL PLACEMENT, AS WELL AS THE TESTS SHOWN ABOVE. WE HAVE RELIED UPON THE CONTRACTOR TO APPLY THE NECESSARY COMPACTIVE EFFORT AND MOISTURE TO ACHIEVE SPECIFIED COMPACTION DURING TIMES WHEN OUR OBSERVER IS NOT PRESENT, AND AT LOCATIONS OTHER THAN THOSE TESTED. TEST DATA ARE NOT THE SOLE BASIS FOR OPINIONS ON WHETHER THE FILL MEETS SPECIFICATIONS.

PROGRESS REPORT THE SITE WAS VISITED EARLY THIS MORNING, HOWEVER THE CONTRACTOR HAD NOT COMPACTED ENOUGH FILL TO REQUIRE TESTING. THE CONSTRUCTION SITE WAS AGAIN VISITED LATE IN THE AFTERNOON, BUT THE CONTRACTOR WAS NOT ON SITE AND HIS EQUIPMENT WAS PARKED IN THE AREAS TO BE TESTED. WE WILL RETURN TOMORROW TO PERFORM COMPACTION TESTS IF NECESSARY.

☐ IN OUR OPINION, FILL COMPACTION MEETS SPECIFICATIONS AS INDICATED BY OUR OBSERVATIONS AND TEST NO.(S) _____

☐ IN OUR OPINION, FILL COMPACTION DOES NOT MEET SPECIFICATIONS AS INDICATED BY OUR OBSERVATIONS AND TEST NO.(S) _____

AND SHOULD BE REWORKED

SCOPE OF OBSERVATION: ☐ FULL TIME; ☒ PERIODIC, ON CALL BASIS; ☒ CONTRACTOR'S OR CLIENT'S REPRESENTATIVE ADVISED RON (REID
BURTON)

CTL/THOMPSON, INC.

IAN SPLATT

FIELD REPRESENTATIVE

IS:PV

APPROVED BY

MARC E. CLEVELAND, P.E.

Compaction Test Report



CTL/THOMPSON, INC.
CONSULTING GEOTECHNICAL
AND MATERIALS ENGINEERS

1971 WEST 12TH AVE., DENVER, CO 80204
(303) 825-0777

CLIENT: PEPSI COLA COMPANY
3801 BRIGHTON BOULEVARD
DENVER, COLORADO 80216

ATTN: MR. DON PATTON

DATE: 11-13-86 JOB NO. 12532
REPORT NO. 51 SHEET 1 OF 1
SUBJECT

PEPSI COLA SPORTS FACILITY
3801 BRIGHTON BOULEVARD
UTILITY TRENCH BACKFILL

TEST NO.	LOCATION	DEPTH FEET *	TEST TYPE	LABORATORY		FIELD			SOIL TYPE
				MAX DENSITY PCF	OMC %	DRY DENSITY PCF	MC %	COM-PACTION %	
170	ELECTRICAL TRENCH--WEST SIDE, 10'E OF RAIL TRACKS	0.0	NUC	126.5	10.0	123	10.9	97	CURVE #2 JOB #11870
*	BELOW FINISHED GRADE								

SPECIFICATIONS: 95 % OF MAXIMUM ASTM D 1557
MOISTURE WITHIN ± 2 % OF OPTIMUM

TYPE OF COMPACTION EQUIPMENT AND NO. OF UNITS:

(1) VIBRATORY TAMPER ATTACHED TO
BACKHOE

MOISTURE ADDED BY

THICKNESS OF LIFT 12 INCHES

TYPE OF EARTH MOVING EQUIPMENT AND NO. OF UNITS:

(1) BACKHOE

THIS REPORT PRESENTS OPINIONS FORMED AS A RESULT OF OUR OBSERVATION OF FILL PLACEMENT, AS WELL AS THE TESTS SHOWN ABOVE. WE HAVE RELIED UPON THE CONTRACTOR TO APPLY THE NECESSARY COMPACTION EFFORT AND MOISTURE TO ACHIEVE SPECIFIED COMPACTION DURING TIMES WHEN OUR OBSERVER IS NOT PRESENT, AND AT LOCATIONS OTHER THAN THOSE TESTED. TEST DATA ARE NOT THE SOLE BASIS FOR OPINIONS ON WHETHER THE FILL MEETS SPECIFICATIONS.

PROGRESS REPORT COMPACTION OF BACKFILL IN THE ELECTRICAL TRENCH WAS
COMPLETED.

☒ IN OUR OPINION, FILL COMPACTION MEETS SPECIFICATIONS AS INDICATED BY OUR OBSERVATIONS AND TEST NO.(S) 170

☐ IN OUR OPINION, FILL COMPACTION DOES NOT MEET SPECIFICATIONS AS INDICATED BY OUR OBSERVATIONS AND TEST NO.(S)

AND SHOULD BE REWORKED

SCOPE OF OBSERVATION: ☐ FULL TIME; ☒ PERIODIC, ON CALL BASIS; ☒ CONTRACTOR'S OR CLIENT'S REPRESENTATIVE ADVISED RON (REID BURTON)

IAN SPLATT

CTL/THOMPSON, INC.

FIELD REPRESENTATIVE

APPROVED BY

MARC E. CLEVELAND, P.E.

IS:PV

Compaction Test Report



CTL/THOMPSON, INC.
CONSULTING GEOTECHNICAL
AND MATERIALS ENGINEERS

1971 WEST 12TH AVE., DENVER, CO 80204
(303) 825-0777

CLIENT: PEPSI COLA COMPANY
3801 BRIGHTON BOULEVARD
DENVER, COLORADO 80216

ATTN: MR. DON PATTON

DATE: 11-17-86 JOB NO. 12532
REPORT NO. 52 SHEET 1 OF 1
SUBJECT

PEPSI COLA SPORTS FACILITY
3801 BRIGHTON BOULEVARD
UTILITY TRENCH BACKFILL

TEST NO.	LOCATION	DEPTH FEET *	TEST TYPE	LABORATORY		FIELD			SOIL TYPE
				MAX DENSITY PCF	OMC %	DRY DENSITY PCF	MC %	COM-PACT %	
171	OUTSIDE WALL-N.W. CORNER KITCHEN-10'W OF BUILDING	1.0	NUC	122	11.3	118	10.3	97	CURVE #3 JOB #11870
172	OUTSIDE WALL-N.W. CORNER KITCHEN-30'W OF BUILDING	2.0	NUC	122	11.3	120	10.1	98	" "
173	INSIDE WALL-CAFETERIA 20'N OF KITCHEN	3.5	NUC	122	11.3	114	10.7	93	" "
173A	RETEST OF #173		NUC	122	11.3	116	9.8	95	" "
*	BELOW GRADE								

SPECIFICATIONS: 95 % OF MAXIMUM ASTM D 1557
MOISTURE WITHIN ± 2 % OF OPTIMUM

TYPE OF COMPACTION EQUIPMENT AND NO. OF UNITS:
(3) VIBRATORY TAMPERS

MOISTURE ADDED BY (1) HOSE

THICKNESS OF LIFT 6-12 INCHES

TYPE OF EARTH MOVING EQUIPMENT AND NO. OF UNITS:
(1) BOBCAT

THIS REPORT PRESENTS OPINIONS FORMED AS A RESULT OF OUR OBSERVATION OF FILL PLACEMENT, AS WELL AS THE TESTS SHOWN ABOVE. WE HAVE RELIED UPON THE CONTRACTOR TO APPLY THE NECESSARY COMPACTIVE EFFORT AND MOISTURE TO ACHIEVE SPECIFIED COMPACTION DURING TIMES WHEN OUR OBSERVER IS NOT PRESENT, AND AT LOCATIONS OTHER THAN THOSE TESTED. TEST DATA ARE NOT THE SOLE BASIS FOR OPINIONS ON WHETHER THE FILL MEETS SPECIFICATIONS.

PROGRESS REPORT THE CONTRACTOR RECOMPACTED FILL IN THE AREA OF TEST NO. 173. THIS AREA WAS THEN RETESTED AS SHOWN BY TEST NO. 173A. CONTRACTOR WAS ADVISED TO COMPACT SOILS AT PRESENT MOISTURE CONTENTS AND TO MAINTAIN LIFT THICKNESS AMOUNT TO 6 TO 12 INCHES .

☒ IN OUR OPINION, FILL COMPACTION MEETS SPECIFICATIONS AS INDICATED BY OUR OBSERVATIONS AND TEST NO.(S) 171, 172, 173A

☐ IN OUR OPINION, FILL COMPACTION DOES NOT MEET SPECIFICATIONS AS INDICATED BY OUR OBSERVATIONS AND TEST NO.(S)

AND SHOULD BE REWORKED

SCOPE OF OBSERVATION: ☐ FULL TIME; ☒ PERIODIC, ON CALL BASIS; ☒ CONTRACTOR'S OR CLIENT'S REPRESENTATIVE ADVISED RON (REID BURTON)

CTL/THOMPSON, INC.

IAN SPLATT

FIELD REPRESENTATIVE

APPROVED BY

MARC E. CLEVELAND, P.E.

IS:PV

Compaction Test Report



CTL/THOMPSON, INC.
CONSULTING GEOTECHNICAL
AND MATERIALS ENGINEERS

1971 WEST 12TH AVE., DENVER, CO 80204
(303) 825-0777

CLIENT: PEPSI COLA COMPANY
3801 BRIGHTON BOULEVARD
DENVER, COLORADO 80216

ATTN: MR. DON PATTON

DATE: 11-18-86 JOB NO. 12532
REPORT NO. 53 SHEET 1 OF 1

SUBJECT

PEPSI COLA SPORTS FACILITY
3801 BRIGHTON BOULEVARD
UTILITY TRENCH BACKFILL

TEST NO.	LOCATION	DEPTH FEET *	TEST TYPE	LABORATORY		FIELD			SOIL TYPE
				MAX DENSITY PCF	OMC %	DRY DENSITY PCF	MC %	COM-PACTION %	
174	N.W. CORNER KITCHEN-OUTSIDE WALL ADJACENT CAFETERIA	0.0	NUC	122.0	11.3	120	11.0	98	CURVE #3 JOB #11870
175	OUTSIDE WALL OF CAFETERIA	2.0	NUC	126.5	10.0	124	9.0	98	CURVE #2 JOB #11870
176	20' WEST (ON RAMP) OF CAFETERIA WALL	0.0	NUC	126.5	10.0	122	9.8	96	" "
*	BELOW FINISHED GRADE								

SPECIFICATIONS: 95 % OF MAXIMUM ASTM D 1557

MOISTURE WITHIN + 2 % OF OPTIMUM

TYPE OF COMPACTION EQUIPMENT AND NO. OF UNITS:

(2) VIBRATORY TAMPERS

MOISTURE ADDED BY ---

THICKNESS OF LIFT 6-12 INCHES

TYPE OF EARTH MOVING EQUIPMENT AND NO. OF UNITS:

(1) BOBCAT

THIS REPORT PRESENTS OPINIONS FORMED AS A RESULT OF OUR OBSERVATION OF FILL PLACEMENT, AS WELL AS THE TESTS SHOWN ABOVE. WE HAVE RELIED UPON THE CONTRACTOR TO APPLY THE NECESSARY COMPACTION EFFORT AND MOISTURE TO ACHIEVE SPECIFIED COMPACTION DURING TIMES WHEN OUR OBSERVER IS NOT PRESENT, AND AT LOCATIONS OTHER THAN THOSE TESTED. TEST DATA ARE NOT THE SOLE BASIS FOR OPINIONS ON WHETHER THE FILL MEETS SPECIFICATIONS.

PROGRESS REPORT THE CONTRACTOR PLANS TO CONSTRUCT A RAMP INSIDE THE CAFETERIA AREA.

☒ IN OUR OPINION, FILL COMPACTION MEETS SPECIFICATIONS AS INDICATED BY OUR OBSERVATIONS AND TEST NO.(S) 174-176

☐ IN OUR OPINION, FILL COMPACTION DOES NOT MEET SPECIFICATIONS AS INDICATED BY OUR OBSERVATIONS AND TEST NO.(S)

AND SHOULD BE REWORKED

SCOPE OF OBSERVATION: ☐ FULL TIME; ☒ PERIODIC, ON CALL BASIS; ☒ CONTRACTOR'S OR CLIENT'S REPRESENTATIVE ADVISED RON (REID BURTON)

IAN SPLATT

FIELD REPRESENTATIVE

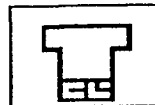
IS;PV

CTL/THOMPSON, INC.

APPROVED BY

MARC E. CLEVELAND, P.E.

Compaction Test Report



CTL/THOMPSON, INC.
CONSULTING GEOTECHNICAL
AND MATERIALS ENGINEERS

1971 WEST 12TH AVE., DENVER, CO 80204
(303) 825-0777

CLIENT: PEPSI COLA COMPANY
3801 BRIGHTON BOULEVARD
DENVER, COLORADO 80216

ATTN: MR. DON PATTON

DATE: 1-7-87 JOB NO. 12532
REPORT NO. 56 SHEET 1 OF 1
SUBJECT

PEPSI COLA SPORTS FACILITY
3801 BRIGHTON BOULEVARD
RAMP AND WALL BACKFILL

TEST NO.	LOCATION	DEPTH FEET *	TEST TYPE	LABORATORY		FIELD			SOIL TYPE
				MAX DENSITY PCF	OMC %	DRY DENSITY PCF	MC %	COM-PACTION %	
181	RAMP E. EDGE; 10'S AT NORTH END OF RAMP	0.0	NUC	122	11.3	116	10.7	95	CURVE #3 JOB #11870
182	RAMP E. EDGE; 10'S AT NORTH END OF RAMP	0.0	NUC	122	11.3	116	12.8	95	" "
183	NORTH WALL OF WEIGHT ROOM; ADJ. TO ENTRANCE	0.0	NUC	122	11.3	111	12.1	91	" "
	(INTERIOR)								
184	NORTH WALL OF WEIGHT ROOM; ADJ. TO ENTRANCE	0.0	NUC	122	11.3	115	10.6	95	" "
	(EXTERIOR)								
*	BELOW GRADE								

SPECIFICATIONS: 95 % OF MAXIMUM ASTM D 1557
MOISTURE WITHIN + 2 % OF OPTIMUM

TYPE OF COMPACTION EQUIPMENT AND NO. OF UNITS:
(2) VIBRATORY TAMPERS

MOISTURE ADDED BY HOSE
THICKNESS OF LIFT 8-12 INCHES

TYPE OF EARTH MOVING EQUIPMENT AND NO. OF UNITS:
(1) BOBCAT

THIS REPORT PRESENTS OPINIONS FORMED AS A RESULT OF OUR OBSERVATION OF FILL PLACEMENT, AS WELL AS THE TESTS SHOWN ABOVE. WE HAVE RELIED UPON THE CONTRACTOR TO APPLY THE NECESSARY COMPACTION EFFORT AND MOISTURE TO ACHIEVE SPECIFIED COMPACTION DURING TIMES WHEN OUR OBSERVER IS NOT PRESENT, AND AT LOCATIONS OTHER THAN THOSE TESTED. TEST DATA ARE NOT THE SOLE BASIS FOR OPINIONS ON WHETHER THE FILL MEETS SPECIFICATIONS.

PROGRESS REPORT THE CONTRACTOR BEGAN FINAL WALL AND RAMP BACKFILLING ADJACENT TO THE MAIN BUILDING ENTRANCE. CONTRACTOR WAS INFORMED OF RESULTS OF TEST #183 AND WAS ADVISED TO DECREASE LIFT SIZE TO A MAXIMUM OF 6 INCHES. THE AREA OF TEST #183 WILL BE REWORKED, AND RETESTED.

☐ IN OUR OPINION, FILL COMPACTION MEETS SPECIFICATIONS AS INDICATED BY OUR OBSERVATIONS AND TEST NO.(S) 181, 182, 184.

☒ IN OUR OPINION, FILL COMPACTION DOES NOT MEET SPECIFICATIONS AS INDICATED BY OUR OBSERVATIONS AND TEST NO.(S) 183 AND SHOULD BE REWORKED

SCOPE OF OBSERVATION: ☐ FULL TIME; ☒ PERIODIC, ON CALL BASIS; ☒ CONTRACTOR'S OR CLIENT'S REPRESENTATIVE ADVISED RON (REID BURTON)

IAN SPLATT

CTL/THOMPSON, INC.

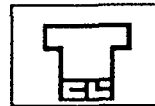
FIELD REPRESENTATIVE

APPROVED BY

MARC E. CLEVELAND, P.E.

IS:PV

Compaction Test Report



CTL/THOMPSON, INC.
CONSULTING GEOTECHNICAL
AND MATERIALS ENGINEERS
1971 WEST 12TH AVE., DENVER, CO 80204
(303) 825-0777

CLIENT: PEPSI COLA COMPANY
3801 BRIGHTON BOULEVARD
DENVER, COLORADO 80216

ATTN: MR. DON PATTON

DATE: 1-8-87 JOB NO. 12532
REPORT NO. 57 SHEET 1 OF 1
SUBJECT

PEPSI COLA SPORTS FACILITY
3801 BRIGHTON BOULEVARD
FOUNDATION WALL BACKFILL

TEST NO.	LOCATION	DEPTH FEET *	TEST TYPE	LABORATORY		FIELD			SOIL TYPE
				MAX DENSITY PCF	OMC %	DRY DENSITY PCF	MC %	COM-PACTION %	
183A	RETEST #183		NUC	122	11.3	117	14.2	96	CURVE #3 JOB #11870
185	ADJACENT TO NORTH WALL OF MAIN ENTRANCE	0.0	NUC	122	11.3	117	15.8	96	
186	N.E. CORNER OF CAFETERIA ROOM	1.5	NUC	126.5	10.4	123	9.5	97	CURVE #2 JOB #11870
*	BELOW GRADE								

SPECIFICATIONS: 95 % OF MAXIMUM ASTM D 1557
MOISTURE WITHIN ± 2 % OF OPTIMUM

TYPE OF COMPACTION EQUIPMENT AND NO. OF UNITS:

(2) VIBRATORY TAMPERS

MOISTURE ADDED BY (1) HOSE

THICKNESS OF LIFT 6 INCHES

TYPE OF EARTH MOVING EQUIPMENT AND NO. OF UNITS:

(1) BOBCAT

THIS REPORT PRESENTS OPINIONS FORMED AS A RESULT OF OUR OBSERVATION OF FILL PLACEMENT, AS WELL AS THE TESTS SHOWN ABOVE. WE HAVE RELIED UPON THE CONTRACTOR TO APPLY THE NECESSARY COMPACTIVE EFFORT AND MOISTURE TO ACHIEVE SPECIFIED COMPACTION DURING TIMES WHEN OUR OBSERVER IS NOT PRESENT, AND AT LOCATIONS OTHER THAN THOSE TESTED. TEST DATA ARE NOT THE SOLE BASIS FOR OPINIONS ON WHETHER THE FILL MEETS SPECIFICATIONS.

PROGRESS REPORT THE CONTRACTOR CONTINUED FILL PLACEMENT ADJACENT TO THE FOUNDATION WALLS AT THE MAIN ENTRANCE AND NORTHEAST CORNER OF CAFETERIA ROOM. CONTRACTOR WAS ADVISED NOT TO USE SOILS WITH ABOVE OPTIMUM MOISTURE CONTENT; TESTS 183A AND 185 WERE WET AT SURFACE ONLY DUE TO SNOW.

X IN OUR OPINION, FILL COMPACTION MEETS SPECIFICATIONS AS INDICATED BY OUR OBSERVATIONS AND TEST NO.(S) 183A, 185, 186

] IN OUR OPINION, FILL COMPACTION DOES NOT MEET SPECIFICATIONS AS INDICATED BY OUR OBSERVATIONS AND TEST NO.(S)

AND SHOULD BE REWORKED

SCOPE OF OBSERVATION: ☐ FULL TIME; ☒ PERIODIC, ON CALL BASIS; ☒ CONTRACTOR'S OR CLIENT'S REPRESENTATIVE ADVISED RON (REID BURTON)

CTL/THOMPSON, INC.

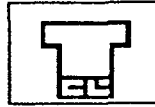
IAN SPLATT

FIELD REPRESENTATIVE

APPROVED BY

MARC E. CLEVELAND, P.E.

S:P.V



CTL/THOMPSON, INC.
CONSULTING GEOTECHNICAL
AND MATERIALS ENGINEERS

1971 WEST 12TH AVE., DENVER, CO 80204
(303) 825-0777

CLIENT: PEPSI COLA COMPANY
3801 BRIGHTON BOULEVARD
DENVER, COLORADO 80216

DATE: 1-13-87 JOB. NO. 12532

REPORT NO. 58 SHEET 1 OF 1

SUBJECT

PEPSI COLA SPORTS FACILITY
3801 BRIGHTON BOULEVARD
FOUNDATION WALL BACKFILL

ATTN: MR. DON PATTON

TEST NO.	LOCATION	DEPTH FEET *	TEST TYPE	LABORATORY		FIELD			SOIL TYPE
				MAX DENSITY PCF	OMC %	DRY DENSITY PCF	MC %	COMPACTION %	
187	INSIDE SOUTH WALL OF MAIN ENTRANCE	0.0	NUC	122	11.3	120	11.7	98	CURVE #3 JOB #11870
188	OUTSIDE OF NORTH PLANTER WALL @ MAIN ENTRANCE	2.5	NUC	122	11.3	120	11.5	98	" "
*	BELOW GRADE								

SPECIFICATIONS: 95 % OF MAXIMUM ASTM D 1557
MOISTURE WITHIN + 2 % OF OPTIMUM

TYPE OF COMPACTION EQUIPMENT AND NO. OF UNITS:

(2) VIBRATORY TAMPERS

MOISTURE ADDED BY (1) HOSE

THICKNESS OF LIFT 6 INCHES

TYPE OF EARTH MOVING EQUIPMENT AND NO. OF UNITS:

(1) BOBCAT

THIS REPORT PRESENTS OPINIONS FORMED AS A RESULT OF OUR OBSERVATION OF FILL PLACEMENT, AS WELL AS THE TESTS SHOWN ABOVE. WE HAVE RELIED UPON THE CONTRACTOR TO APPLY THE NECESSARY COMPACTIVE EFFORT AND MOISTURE TO ACHIEVE SPECIFIED COMPACTION DURING TIMES WHEN OUR OBSERVER IS NOT PRESENT, AND AT LOCATIONS OTHER THAN THOSE TESTED. TEST DATA ARE NOT THE SOLE BASIS FOR OPINIONS ON WHETHER THE FILL MEETS SPECIFICATIONS.

PROGRESS REPORT THE CONTRACTOR CONTINUED BACKFILLING ADJACENT TO PLANTER AND THE ENTRANCE
WALLS. CONTRACTOR ADVISED TO DECREASE MOISTURE CONTENT OF THE UNCOMPACTED FILL AT
THE SOUTH PLANTER WALL.

2) IN OUR OPINION, FILL COMPACTION MEETS SPECIFICATIONS AS INDICATED BY OUR OBSERVATIONS AND TEST NO.(S) 187-188

☐ IN OUR OPINION, FILL COMPACTION DOES NOT MEET SPECIFICATIONS AS INDICATED BY OUR OBSERVATIONS AND TEST NO.(S) _____ AND SHOULD BE REWORKED

SCOPE OF OBSERVATION: ☐ FULL TIME; ☒ PERIODIC, ON CALL BASIS; ☒ CONTRACTOR'S OR CLIENT'S REPRESENTATIVE ADVISED RON (REID BURTON)

CTL/THOMPSON, INC.

FIELD REPRESENTATIVE

IAN SPLATT

APPROVED BY

MARC E. CLEVELAND, P.E.

[S:Pv

Compaction Test Report



CTL/THOMPSON, INC.
CONSULTING GEOTECHNICAL
AND MATERIALS ENGINEERS
1971 WEST 12TH AVE., DENVER, CO 80204
(303) 825-0777

CLIENT: PEPSI COLA COMPANY
3801 BRIGHTON BOULEVARD
DENVER, COLORADO 80216

ATTN: MR. DON PATTON

DATE: 1-14-87 JOB NO. 12532
REPORT NO. 59 SHEET 1 OF 1
SUBJECT

PEPSI COLA SPORTS FACILITY
3801 BRIGHTON BOULEVARD
FOUNDATION WALL BACKFILL

TEST NO.	LOCATION	DEPTH FEET *	TEST TYPE	LABORATORY		FIELD			SOIL TYPE
				MAX DENSITY PCF	OMC %	DRY DENSITY PCF	MC %	COM-PACTION %	
189	OUTSIDE WEST WALL OF PLANTER	0.0	NUC	122	11.3	114	13.2	93	CURVE #3 JOB #11870
190	OUTSIDE SOUTH WALL OF PLANTER	3.5	NUC	122	11.3	119	10.7	98	" "
189A	RETEST #189		NUC	122	11.3	119	12.4	98	" "
191	INSIDE NORTH WALL OF PLANTER	2.0	NUC	122	11.3	116	11.0	95	" "
192	INSIDE SOUTH WALL OF PLANTER	1.0	NUC	122	11.3	119	11.1	98	" "
*	BELOW GRADE								

SPECIFICATIONS: 95 % OF MAXIMUM ASTM D 1557
MOISTURE WITHIN ± 2 % OF OPTIMUM

TYPE OF COMPACTION EQUIPMENT AND NO. OF UNITS:

(2) VIBRATORY TAMPERS

MOISTURE ADDED BY (1) HOSE

THICKNESS OF LIFT 6 INCHES

TYPE OF EARTH MOVING EQUIPMENT AND NO. OF UNITS:

(1) BOBCAT

THIS REPORT PRESENTS OPINIONS FORMED AS A RESULT OF OUR OBSERVATION OF FILL PLACEMENT, AS WELL AS THE TESTS SHOWN ABOVE. WE HAVE RELIED UPON THE CONTRACTOR TO APPLY THE NECESSARY COMPACTIVE EFFORT AND MOISTURE TO ACHIEVE SPECIFIED COMPACTION DURING TIMES WHEN OUR OBSERVER IS NOT PRESENT, AND AT LOCATIONS OTHER THAN THOSE TESTED. TEST DATA ARE NOT THE SOLE BASIS FOR OPINIONS ON WHETHER THE FILL MEETS SPECIFICATIONS.

PROGRESS REPORT THE CONTRACTOR CONTINUED BACKFILLING ADJACENT TO THE PLANTER WALLS. WORK IS SCHEDULED FOR COMPLETION THURSDAY JANUARY 15, 1987.

☒ IN OUR OPINION, FILL COMPACTION MEETS SPECIFICATIONS AS INDICATED BY OUR OBSERVATIONS AND TEST NO.(S) 189A, 190-192

☐ IN OUR OPINION, FILL COMPACTION DOES NOT MEET SPECIFICATIONS AS INDICATED BY OUR OBSERVATIONS AND TEST NO.(S) _____

AND SHOULD BE REWORKED

SCOPE OF OBSERVATION: ☐ FULL TIME; ☒ PERIODIC, ON CALL BASIS; ☒ CONTRACTOR'S OR CLIENT'S REPRESENTATIVE ADVISED RON (REID BURTON)

CTL/THOMPSON, INC.

IAN SPLATT

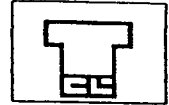
FIELD REPRESENTATIVE

APPROVED BY

MARC E. CLEVELAND, P.E.

IS:PV

THOMPSON, INC.
CONSULTING GEOTECHNICAL
MATERIALS ENGINEERS



Job No. 11870

Date 7-3-85

Subject: Fill Control at

PEPSI PLANT - ATHLETIC CENTER

3801 BRIGHTON BLVD

CONSTRUCTION OBSERVATION

Daily Report No. 1

PEPSI COLA BOTTLING COMPANY OF DENVER
3801 BRIGHTON BLVD
DENVER, COLORADO 80216
ATTN: MR. DON PATTON

LOCATION	DEPTH	TEST TYPE	SPEC. MAX. DENSITY R.C.F.	O.M.C. %	DRY DENSITY R.C.F.	MOISTURE CONTENT %	COMPACTION	SOIL TYPE

Type of compaction equipment and number of units:

Number of passes:

Thickness of lift inches.

Method of adding moisture:

Type of earth moving equipment and number of units: (1) DOZER (1) SCRAPER

Dress Report:

REQUESTED BY RON CARPENTER WITH REID BURTON CONSTRUCTION A SITE VISIT WAS MADE TO OBSERVE THE REMOVAL OF MATERIAL FROM THE ATHLETIC CENTER AREA. UPON OUR ARRIVAL THE CONTRACTOR HAD STARTED TO SUB-EXCAVATE ALONG THE WEST SIDE OF THE ATHLETIC CENTER. AT THE TIME OF OUR FIRST VISIT, APPROXIMATELY 4 FEET OF MATERIAL HAD BEEN REMOVED IN AN AREA 20 FEET WIDE BY 60 FEET LONG. THE CONTRACTOR WAS STILL IN LOOSE FILL WITH SOME DEBRIS AT THIS DEPTH SO WE RECOMMENDED THEY CONTINUE SUB-EXCAVATING AND WOULD RETURN LATER IN THE DAY TO OBSERVE THEIR PROGRESS. WHEN WE RETURNED THE CONTRACTOR HAD EXCAVATED TO A DEPTH OF APPROXIMATELY 8 FEET IN THE ABOVE MENTIONED AREA. AT A DEPTH OF APPROXIMATELY 7 FEET THE CONTRACTOR CUT THROUGH THE LOOSE FILL TO A NATURAL SANDY CLAY. THE CONTRACTOR SAID HE WOULD START EXCAVATING ANOTHER FOOT STRIP BUT WOULD NOT START FILL PLACEMENT UNTIL MONDAY (7-8-85)

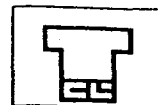
PAUL HUNSADER

Field Engineer

Approved by: RONALD M. MC OMBER, P.E.

CF

THOMPSON, INC.
CONSULTING GEOTECHNICAL
MATERIALS ENGINEERS



Job No. 11870

Date 7-8-85

Subject: Fill Control at

PEPSI PLANT - ATHLETIC CENTER

3801 BRIGHTON BLVD

FILL OBSERVATION

Daily Report No. 2

PEPSI COLA BOTTLING COMPANY OF DENVER

3801 BRIGHTON BLVD

DENVER, COLORADO 80216

ATTN: MR. DON PATTON

T	LOCATION	DEPTH	TEST TYPE	SPEC. MAX. DENSITY P.C.F.	O.M.C. %	DRY DENSITY P.C.F.	MOISTURE CONTENT %	COMPACTION	SOIL TYPE

Equipment of compaction equipment and number of units: (1) SHEEPSFOOT COMPACTOR

Number of passes: _____

Thickness of lift _____ inches.

Method of adding moisture: (1) WATER TRUCK

Equipment of earth moving equipment and number of units: (1) 621 SCRAPER (1) DOZER (1) LOADER

Dress Report:

THE TIME OF OUR SITE VISIT, THE CONTRACTOR WAS EXCAVATING EXISTING FILL MATERIAL FROM THE WEST SIDE OF THE ATHLETIC CENTER. THE EXISTING FILL MATERIAL WAS THEN STOCKED FOR LATER USE. THE CONTRACTOR THEN STARTED TO REWORK AND RECOMPACT MATERIAL IN SAME AREA.

KIRK STEADMAN/WILLIAM KLETT

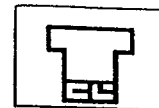
Field Engineer

NK:CF

Approved by:

RONALD M. MC OMBER, P.E.

L/THOMPSON, INC.
CONSULTING GEOTECHNICAL
AND MATERIALS ENGINEERS



Job No. 11870

Date 7-9-85

Subject: Fill Control at

PEPSI PLANT - ATHLETIC CENTER

3801 BRIGHTON BLVD

FILL OBSERVATION

TO: PEPSI COLA BOTTLING COMPANY OF DENVER

3801 BRIGHTON BLVD

DENVER, COLORADO 80216

ATTN: MR. DON PATTON

Daily Report No. 3

LOCATION	DEPTH *	TEST TYPE	SPEC. MAX. DENSITY ** P.C.F.	O.M.C. %	DRY DENSITY P.C.F.	MOISTURE CONTENT %	COMPACTION %	SOIL TYPE
25' N & 80' E OF N.W. CORNER OF BLDG	6.5	SAND	132	8.0	113	7.3	85	SAND GRAVELLY
RETEST OF #1		SAND	132	8.0	119	7.1	90	" "
RETEST OF #2		SAND	132	8.0	120	6.6	90	" "
25' N & 60' E OF N.W. CORNER OF BLDG	6.5	SAND	132	8.0	115	6.2	87	" "
RETEST OF #4		NUC	132	8.0	123	6.8	93	" "

Type of compaction equipment and number of units: (1) LOADED FRONT-END LOADER WHEEL ROLLING

Number of passes: VARIED

Thickness of lift inches.

Method of adding moisture: (1) WATER TRUCK

Type of earth moving equipment and number of units: (1) 621 SCRAPER (1) DOZER

Dress Report:

REQUESTED, OUR FIELD ENGINEER VISITED THE SITE TO OBSERVE REMOVAL OF FILL AND TRASH, AND TO PERFORM FIELD DENSITY TESTS ON THE REPLACED AND COMPACTED FILL. THE CONTRACTOR CONTINUED WORK ON THE WEST SIDE OF THE ATHLETIC BUILDING AREA. THE CONTRACTOR WAS INFORMED OF THE FAILING TEST RESULTS AND WAS ADVISED TO REWORK AND RECOMPACT THE FILL.

BELOW GRADE (FEET)

MAXIMUM DENSITY ESTIMATED BASED UPON A ONE-
POINT STANDARD PROCTOR (ASTM D 698-78)

WILLIAM KLETT
Field Engineer

Approved by: RONALD M. MC OMBER, P.E.

CF

THOMPSON, INC.
CONSULTING GEOTECHNICAL
MATERIALS ENGINEERS



Job No. 11870

Date 7-12-85

Subject: Fill Control at

PEPSI PLANT, ATHLETIC COMPLEX

3801 BRIGHTON BLVD

FILL PLACEMENT

Daily Report No. 5

PEPSI COLA BOTTLING COMPANY OF DENVER

3801 BRIGHTON BLVD

DENVER, COLORADO 80216

ATTN: MR. DON PATTON

T	LOCATION	DEPTH	TEST TYPE	SPEC. MAX. DENSITY P.C.F.	O.M.C. %	DRY DENSITY P.C.F.	MOISTURE CONTENT %	COMPACTION	SOIL TYPE

of compaction equipment and number of units: _____

ber of passes: _____

kness of lift _____ inches.

od of adding moisture: _____

of earth moving equipment and number of units: (1) DOZER

ress Report:

REQUESTED, OUR FIELD ENGINEER VISITED THE SITE FOR THE ATHLETIC CENTER AT THE PEPSI PLANT. DUE TO MECHANICAL PROBLEMS WITH A FRONT-END LOADER, THE CONTRACTOR WAS UNABLE TO REMOVE OR PLACE AND COMPACT ANY FILL MATERIAL. THE CONTRACTOR USED A DOZER TO INSTRUCT TEMPORARY RAMPS. NO TESTING WAS NECESSARY.

WILLIAM KLETT

Field Engineer

CF

Approved by:

RONALD M. MC OBER, P.E.

THOMPSON, INC.
SULTING GEOTECHNICAL
MATERIALS ENGINEERS



Job No. 11870

Date 7-13-85

Subject: Fill Control at
PEPSI PLANT - ATHLETIC CENTER

3801 BRIGHTON BLVD

SITE GRADING

Daily Report No. 6

PEPSI COLA BOTTLING COMPANY OF DENVER

3801 BRIGHTON BLVD

DENVER, COLORADO 80216

ATTN: MR. DON PATTON

MEASUREMENTS FROM LOCATION N.E. CORNER OF LOADING DOCK:	DEPTH *	TEST TYPE	SPEC. MAX. DENSITY **P.C.F.	O.M.C. %	DRY DENSITY P.C.F.	MOISTURE CONTENT %	COMPACTION %	SOIL TYPE
RETEST OF #9		NUC	132	8.0	125	7.2	95	SAND, GRAVELLY
RETEST OF #8		NUC	127	10.0	120	10.9	95	SAND, SILTY
50'N & 50'E	4.0	NUC	122	12.0	118	8.5	97	SAND, SILTY CLAYEY
150'N	4.0	NUC	122	12.0	117	13.1	96	" "
125'N & 50'E	3.0	NUC	122	12.0	119	12.5	98	" "
50'N & 50'E	3.0	NUC	120	13.5	111	14.6	93	SAND, SILTY CLAYEY
200'E & 50'S	9.0	NUC	120	13.5	112	13.6	93	" "
100'N & 75'E	2.0	NUC	122	12.0	116	11.1	95	" "
50'N & 75'E	2.0	NUC	122	12.0	116	11.5	95	" "
RETEST OF #15		NUC	120	13.5	114	11.6	95	" "

of compaction equipment and number of units: (1) SELF PROPELLED SHEEPSFOOT COMPACTOR

er of passes: VARIED

knness of lift 1 inches.

od of adding moisture: (1) WATER TRUCK

of earth moving equipment and number of units: (1) SCRAPER (1) DOZER (1) FRONT-END LOADER

ess Report:

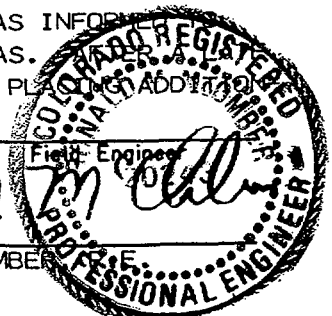
ON ARRIVAL AT THE JOB SITE THE CONTRACTOR WAS PLACING FILL IN THE AREA
TH OF THE LOADING DOCK IN THIN LIFTS. MATERIAL FROM THE AREA IMMEDIATELY TO THE
THEAST WAS BEING USED FOR FILL UNTIL ORGANIC DEBRIS AND SATURATED CLAYS WERE EN-
ENTERED 4 FEET BELOW TOP OF EXISTING ASPHALT. THE CONTRACTOR EXCAVATED 10 TO 12
T IN THE BORROW AREA AND WAS INFORMED THIS MATERIAL SHOULD NOT BE USED FOR FILL.
OF ROLLING OF THE AREA EAST OF THE BORROW REVEALED SEVERAL SPOTS WHICH DEFORMED
ESSIVELY. THE CONTRACTOR WAS INFORMED THE WET SOILS SHOULD BE REMOVED OR STABIL-
D. IN THE AREA IN WHICH TEST #16 WAS PERFORMED, THE MATERIAL WAS COMPLETELY
OVED AND NEW TESTS IN THIS AREA WILL BE REQUIRED. THE CONTRACTOR WAS INFORMED
OF ROLL THE NATURAL SOILS BEFORE PLACING FILL TO CHECK FOR SOFT AREAS.
ERNOON RAIN, THE CONTRACTOR WAS INFORMED TO LET THE SOIL DRY BEFORE PLACING ADDITIONAL
FILL. THE CONTRACTOR WAS INFORMED OF ALL TEST RESULTS.

BELOW GRADE (FEET)

MAXIMUM DENSITY ESTIMATED BASED UPON A ONE-
POINT MODIFIED PROCTOR (ASTM D 1557-78)

Approved by:

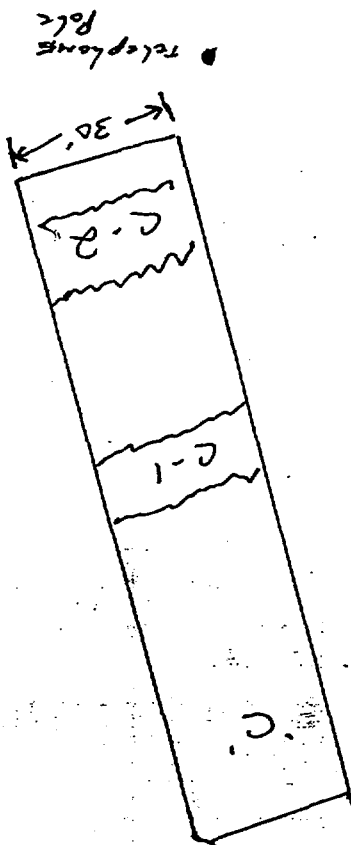
RONALD M. MC OMBE



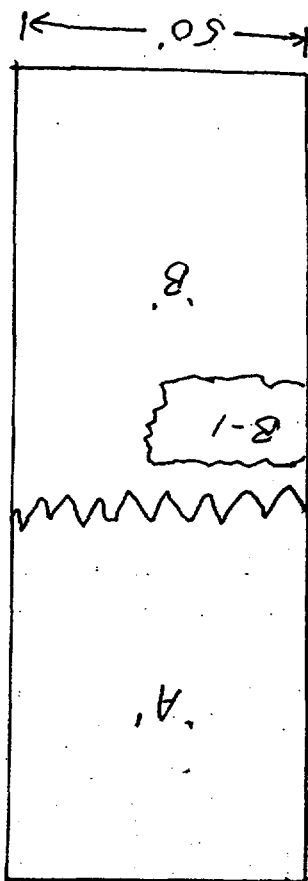
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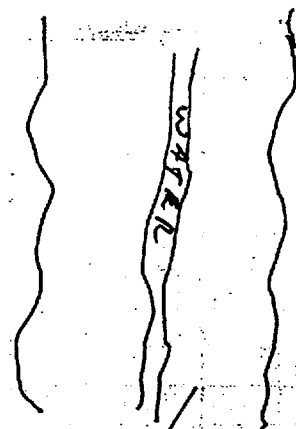


Relay House



Loading Deck

Prop



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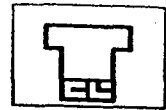
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7-13-84

11850

Regist' Code

THOMPSON, INC.
CONSULTING GEOTECHNICAL
MATERIALS ENGINEERS



Job No. 11870

Date 7-15-85

Subject: Fill Control at
PEPSI PLANT - ATHLETIC COMPLEX

3801 BRIGHTON BLVD

FILL PLACEMENT

Daily Report No. 8

PEPSI COLA BOTTLING COMPANY OF DENVER
3801 BRIGHTON BLVD
DENVER, COLORADO 80216
ATTN: MR. DON PATTON

LOCATION	DEPTH	TEST TYPE	SPEC. MAX. DENSITY P.C.F.	O.M.C. %	DRY DENSITY P.C.F.	MOISTURE CONTENT %	COMPACTION	SOIL TYPE

of compaction equipment and number of units: _____

ber of passes: _____

kness of lift _____ inches.

od of adding moisture: _____

of earth moving equipment and number of units: _____

ress Report:

VISITED THE SITE TO CHECK THE JOB STATUS. EXCESSIVE MOISTURE CONTENT OF THE FILL
RIAL CAUSED BY HEAVY RAINS PREVENTED THE CONTRACTOR FROM WORKING.

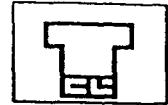
WILLIAM KLETT

Field Engineer

F

Approved by: _____
RONALD M. MC OMBER, P.E.

J. THOMPSON, INC.
CONSULTING GEOTECHNICAL
MATERIALS ENGINEERS



Job No. 11870

Date 7-14-85

Subject: Fill Control at

PEPSI PLANT - ATHLETIC CENTER

3801 BRIGHTON BLVD

FILL PLACEMENT

Daily Report No. 7

PEPSI COLA BOTTLING COMPANY OF DENVER

3801 BRIGHTON BLVD

DENVER, COLORADO 80216

ATTN: MR. DON PATTON

FROM S.E. CORNER OF LOADING DOCK EXCAVATION:	DEPTH *	TEST TYPE	SPEC. MAX. DENSITY P.C.F.	O.M.C. %	DRY DENSITY P.C.F.	MOISTURE CONTENT %	COMPACTION %	SOIL TYPE
50'N & 10'E	8.0	SAND	**122.0	12.0	111	13.1	91	SAND, CLAYEY
80'N & 45'E	8.0	SAND	**112.5	16.5	96	17.0	85	" "
RETEST OF #20		SAND	**124.5	11.0	111	6.7	89	SAND, SILTY
RETEST OF #21		SAND	**127.5	10.0	108	6.5	85	" "
RETEST OF #22		NUC	134***	7.5	124	8.9	93	" "
RETEST OF #23		NUC	134***	7.5	124	8.1	93	" "
60'N & 10'E	7.0	NUC	134***	7.5	125	9.1	93	" "

of compaction equipment and number of units: (1) CAT 825 COMPACTOR

Number of passes: —

Kniss of lift — inches.

Method of adding moisture: (1) WATER TRUCK

Method of earth moving equipment and number of units: (1) 621 SCRAPER (1) 633 SCRAPER (1) FRONT-END LOADER

Test Report:

CONTRACTOR WAS PLACING FILL IN AN AREA NEAR THE TELEPHONE POLE DIRECTLY IN FRONT OF THE LOADING DOCK DOORS. THIS AREA WAS BOUNDED BY CORNERS WITH THE FOLLOWING LOCATIONS: 15'W, 15'N, 95'N BY 10'W, 95'N BY 85'W. A BAND OF UNTOUCHED MATERIAL BORDERED THIS FILL AREA ON EAST SIDE, EXTENDED THE ENTIRE LENGTH OF THE FILL AND MEASURING 15' ACROSS ON THE SOUTH SIDE. TO A POINT 100' AWAY, THUS FORMING A RIGHT TRIANGLE WHOSE BASE LIES ALONG THE SOUTH SIDE OF THE FILL AREA. TO THE EAST OF THIS BAND WAS A FILL AREA 30' ACROSS AND WHICH EXTENDED THE ENTIRE LENGTH OF THE BAND (110'). TWO DEFORMING AREAS EXISTED IN THIS FILL AREA. THE FIRST DEFORMING AREA WAS APPROXIMATELY 50' NORTH FROM THE TELEPHONE POLE AND EXTENDED THE REMAINDER OF THIS SECTION. THE CENTER OF THE SECOND WAS 20'N AND 10'E OF THE TELEPHONE POLE WITH A RADIUS OF ABOUT 10'. WHEN TESTS IN THE FILL AREA FAILED THE CONTRACTOR AND DEVELOPER AGREED TO REFILL THE AREA SO IT COULD BE USED BY PEPSI ON MONDAY MORNING. IT WAS DECIDED THEY WOULD, AT A LATER DATE, REMOVE THE FILL TO A DEPTH OF 8' BELOW GRADE, REGRADE THIS AREA, AND THEN PROCEED TO PLACE FILL IN THE AREA IN A METHOD TO MEET REQUIRED SPECIFICATIONS. THE BAND OF UNTOUCHED MATERIAL WOULD BE REMOVED AS ORIGINALLY PLANNED FOR THE ENTIRE FILL AREA. APPROVED BY: GREG BARTLETT/KIRK SKINNER/PAUL HUNSADER
Field Engineer

IN THE AREA IN A METHOD TO MEET REQUIRED SPECIFICATIONS. THE BAND OF UNTOUCHED MATERIAL WOULD BE REMOVED AS ORIGINALLY PLANNED FOR THE ENTIRE FILL AREA.

Approved by:

RONALD M. MC COMBER, P.E.

BELOW GRADE

MAXIMUM DENSITY ESTIMATED BASED UPON A ONE-POINT STANDARD PROCTOR (ASTM D 698-78)
MAXIMUM DENSITY ESTIMATED BASED UPON A ONE-POINT MODIFIED PROCTOR (ASTM D 1557-78)
1971 WEST 12TH AVENUE • DENVER, COLORADO 80204 • (303) 825-0777

L/THOMPSON, INC.
CONSULTING GEOTECHNICAL
AND MATERIALS ENGINEERS



Job No. 11870

Date 7-17-85

Subject: Fill Control at

to: PEPSI COLA BOTTLING COMPANY OF DENVER

PEPSI PLANT - ATHLETIC CENTER

3801 BRIGHTON BLVD

3801 BRIGHTON BLVD

DENVER, COLORADO 80216

FILL OBSERVATION

ATTN: DON PATTON

Daily Report No. 9

ST D.	LOCATION	DEPTH	TEST TYPE	SPEC. MAX. DENSITY P.C.F.	O.M.C. %	DRY DENSITY P.C.F.	MOISTURE CONTENT %	COMPACTION	SOIL TYPE

Type of compaction equipment and number of units: _____

Number of passes: _____

Thickness of lift _____ inches.

Method of adding moisture: _____

Type of earth moving equipment and number of units: (1) DOZER (1) 621 SCRAPER

Progress Report:

REQUESTED, OUR FIELD ENGINEER VISITED THE SITE TO MONITOR EXCAVATION IN THE BUILDING A OF THE ATHLETIC COMPLEX. THE EXCAVATOR CONTINUED EXCAVATION NORTHWARD DOWN TO ORIGINAL NATURAL GRADE, AND REMOVED ALL LOOSE FILL MATERIAL. THE FILL WAS THEN PLACED A STOCKPILE TO BE USED AT A LATER TIME.

WILLIAM KLETT

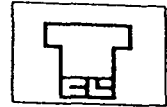
Field Engineer

Approved by: _____

RONALD M. MC OMBER, P.E.

CF

THOMPSON, INC.
CONSULTING GEOTECHNICAL
MATERIALS ENGINEERS



Job No. 11870

Date 7-18-85

PEPSI COLA BOTTLING COMPANY OF DENVER
3801 BRIGHTON BLVD
DENVER, COLORADO 80216
ATTN: MR. DON PATTON

Subject: Fill Control at
PEPSI PLANT ATHLETIC CENTER
3801 BRIGHTON BLVD
FILL OBSERVATION
Daily Report No. 10

T	LOCATION	DEPTH	TEST TYPE	SPEC. MAX. DENSITY P.C.F.	O.M.C. %	DRY DENSITY P.C.F.	MOISTURE CONTENT %	COMPACTION	SOIL TYPE

Method of compaction equipment and number of units: _____
 Number of passes: _____
 Thickness of lift _____ inches.
 Method of adding moisture: _____
 Type of earth moving equipment and number of units: (1) LOADER (1) BACKHOE

Test Report:
 REQUESTED, OUR FIELD ENGINEER VISITED THE SITE TO OBSERVE THE FILL PLACEMENT. TESTS HOLES WERE DUG IN THE LOADING DOCK AREA. EMPIRE LABORATORIES WAS HIRED THE EXCAVATOR TO RETEST COMPACTION IN THE LOADING DOCK AREAS. THE TESTS INDICATED SATISFACTORY COMPACTION. ROCK WAS PLACED TO HELP STABILIZE A PUMPING AREA LOCATED NORTH OF THE NORTHWEST CORNER OF THE LOADING DOCK.

WILLIAM KLETT

Field Engineer

F

Approved by: _____
 RONALD M. MC OMBER, P.E.



CTL/THOMPSON, INC.
CONSULTING GEOTECHNICAL
AND MATERIALS ENGINEERS
1971 WEST 12TH AVE., DENVER, CO 80204
(303) 825-0777

CLIENT: PEPSI COLA BOTTLING CO. OF DENVER
3801 BRIGHTON BOULEVARD
DENVER, COLORADO 80216
ATT: MR. DON PATTON

DATE: 07/30/85 JOB. NO. 11870
REPORT NO. 14 SHEET 1 OF 1
SUBJECT PEPSI COLA ATHLETIC COMPLEX
3801 BRIGHTON BOULEVARD
FILL OBSERVATION

[illegible]

SPECIFICATIONS: 95 % OF MAXIMUM
MOISTURE WITHIN _____ % OF OPTIMUM

TYPE OF COMPACTION EQUIPMENT AND NO. OF UNITS:

1.) SHEEPSFOOT COMPACTOR

1)LOADED 621 SCRAPER

MOISTURE ADDED BY WATER TRUCK

HICKNESS OF LIFT 4-6 INCHES

TYPE OF EARTH MOVING EQUIPMENT AND NO. OF UNITS:

1) 621 SCRAPER, 1) FRONTEND LOADER

THIS REPORT PRESENTS OPINIONS FORMED AS A RESULT OF OUR OBSERVATION OF FILL PLACEMENT, AS WELL AS THE TESTS SHOWN ABOVE. WE HAVE RELIED UPON THE CONTRACTOR TO APPLY THE NECESSARY COMPACTIVE EFFORT AND MOISTURE TO ACHIEVE SPECIFIED COMPACTION DURING TIMES WHEN OUR OBSERVER IS NOT PRESENT, AND AT LOCATIONS OTHER THAN THOSE TESTED. TEST DATA ARE NOT THE SOLE BASIS FOR OPINIONS ON WHETHER THE FILL MEETS SPECIFICATIONS.

PROGRESS REPORT THE CONTRACTOR CONTINUED EXCAVATION IN THE AREA 300 FEET NORTH OF THE
EXISTING LOADING DOCK. A SMALL AMOUNT OF FILL WAS PLACED ACROSS THE ENTIRE LOT.
THIS OPERATION WAS CURTAILED DUE TO THE BREAKDOWN OF THE SHEEPSFOOT COMPACTOR. NO
TESTING WAS NECESSARY. ROCK WAS PLACED ALONG THE NORTH SIDE OF THE DRAINAGE CULVERT
WHICH RUNS ALONG THE NORTHERN SIDE OF THE PEPSI COLA BOTTLING BUILDING.

K IN OUR OPINION, FILL COMPACTION MEETS SPECIFICATIONS AS INDICATED BY OUR OBSERVATIONS AND TEST NO.(S) _____

IN OUR OPINION, FILL COMPACTION DOES NOT MEET SPECIFICATIONS AS INDICATED BY OUR OBSERVATIONS AND TEST NO.(S) _____

AND SHOULD BE REWORKED

SCOPE OF OBSERVATION: ☐ FULL TIME; ☐ PERIODIC, ON CALL BASIS; ☐ CONTRACTOR'S OR CLIENT'S REPRESENTATIVE ADVISED _____

CTL/THOMPSON, INC.

WILLIAM Y. KLETT III
FIELD REPRESENTATIVE

APPROVED BY RONALD M. MC OMBER P.E.

YK:RS



CTL/THOMPSON, INC.
CONSULTING GEOTECHNICAL
AND MATERIALS ENGINEERS

1971 WEST 12TH AVE., DENVER, CO 80204
(303) 825-0777

CRENT: =

PEPSI COLA BOTTLING CO. OF DENVER
3801 BRIGHTON BOULEVARD
DENVER, COLORADO 80216
ATT: MR. DON PATTON

DATE: 08/01/85 JOB. NO. 11870
REPORT NO. 16 SHEET 1 OF 1
SUBJECT PEPSI COLA ATHLETIC COMPLEX
3801 BRIGHTON BOULEVARD
FILL OBSERVATION

[illegible]

SPECIFICATIONS: % OF MAXIMUM
MOISTURE WITHIN % OF OPTIMUM

TYPE OF COMPACTION EQUIPMENT AND NO. OF UNITS:

1.) SHEEPSFOOT COMPACTOR

MOISTURE ADDED BY _____

HICKNESS OF LIFT 4-6 INCHES

TYPE OF EARTH MOVING EQUIPMENT AND NO. OF UNITS:

1)DOZER 1)621 SCRAPER

THIS REPORT PRESENTS OPINIONS FORMED AS A RESULT OF OUR OBSERVATION OF FILL PLACEMENT, AS WELL AS THE TESTS SHOWN ABOVE. WE HAVE RELIED UPON THE CONTRACTOR TO APPLY THE NECESSARY COMPACTIVE EFFORT AND MOISTURE TO ACHIEVE SPECIFIED COMPACTION DURING TIMES WHEN OUR OBSERVER IS NOT PRESENT AND AT LOCATIONS OTHER THAN THOSE TESTED. TEST DATA ARE NOT THE SOLE BASIS FOR OPINIONS ON WHETHER THE FILL MEETS SPECIFICATIONS.

PROGRESS REPORT THE CONTRACTOR EXCAVATED WET FILL FROM AN AREA 300 FEET NORTH OF THE EXISTING
LOADING DOCK AND FROM AN AREA 250 FEET NORTH OF THE LOADING DOCK. APPROXIMATELY 4
INCHES OF THE FILL WAS PLACED IN AN AREA ADJACENT TO THE LOADING DOCK. NO TESTS
WERE NECESSARY.

IN OUR OPINION, FILL COMPACTION MEETS SPECIFICATIONS AS INDICATED BY OUR OBSERVATIONS AND TEST NO.(S) _____

IN OUR OPINION, FILL COMPACTION DOES NOT MEET SPECIFICATIONS AS INDICATED BY OUR OBSERVATIONS AND TEST NO. (S) _____

AND SHOULD BE REWORKED

SCOPE OF OBSERVATION: ☒ FULL TIME; ☐ PERIODIC, ON CALL BASIS; ☐ CONTRACTOR'S OR CLIENT'S REPRESENTATIVE ADVISED

WILLIAM Y. KLETT III

CTL/THOMPSON INC.

OLD REPRESENTATIVE

APPROVED BY

RONALD M. MC OMBER P.E.



CTL/THOMPSON, INC.
CONSULTING GEOTECHNICAL
AND MATERIALS ENGINEERS

1971 WEST 12TH AVE., DENVER, CO 80204
(303) 825-0777

CLIENT:

PEPSI-COLA BOTTLING CO. OF DENVER
3801 BRIGHTON BOULEVARD
DENVER COLORADO 80216
ATTN: MR. DON PATTON

DATE: 09/18/85 JOB NO. 11870
REPORT NO. 23 SHEET 1 OF 1
SUBJECT PEPSI-COLA ATHLETIC COMPLEX
3801 BRIGHTON BOULEVARD
FILL OBSERVATION

[illegible]

SPECIFICATIONS: _____ % OF MAXIMUM _____
 MOISTURE WITHIN _____ % OF OPTIMUM _____
 TYPE OF COMPACTION EQUIPMENT AND NO. OF UNITS: _____

MOISTURE ADDED BY _____
 THICKNESS OF LIFT _____ INCHES
 TYPE OF EARTH MOVING EQUIPMENT AND NO. OF UNITS: _____

THIS REPORT PRESENTS OPINIONS FORMED AS A RESULT OF OUR OBSERVATION OF FILL PLACEMENT, AS WELL AS THE TESTS SHOWN ABOVE. WE HAVE RELIED UPON THE CONTRACTOR TO APPLY THE NECESSARY COMPACTIVE EFFORT AND MOISTURE TO ACHIEVE SPECIFIED COMPACTION DURING TIMES WHEN OUR OBSERVER IS NOT PRESENT, AND AT LOCATIONS OTHER THAN THOSE TESTED. TEST DATA ARE NOT THE SOLE BASIS FOR OPINIONS ON WHETHER THE FILL MEETS SPECIFICATIONS.

PROGRESS REPORT PRIOR TO THIS SITE VISIT THE CONTRACTOR HAD PLACED APPROXIMATELY 6 INCHES
OF 2 INCH CRUSHED ROCK FROM STATIONS 8+00 TO 7+00 ON THE PROPOSED BOX CULVERT
IN PREPARATION FOR INSTALLATION OF THE CONCRETE FLOOR SECTION. THE SURFACE OF THIS
AREA APPEARED STABLE WITH NO SOFT SPOTS.

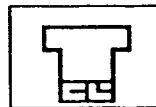
☐ IN OUR OPINION, FILL COMPACTION MEETS SPECIFICATIONS AS INDICATED BY OUR OBSERVATIONS AND TEST NO.(S) _____
☐ IN OUR OPINION, FILL COMPACTION DOES NOT MEET SPECIFICATIONS AS INDICATED BY OUR OBSERVATIONS AND TEST NO.(S) _____
 AND SHOULD BE REWORKED
 SCOPE OF OBSERVATION: ☐ FULL TIME; ☒ PERIODIC, ON CALL BASIS; ☐ CONTRACTOR'S OR CLIENT'S REPRESENTATIVE ADVISED _____

CTL/THOMPSON, INC.

DELMAR FISCHER
FIELD REPRESENTATIVE
DF:RS

APPROVED BY RONALD M. MC OMBER P.E.

Compaction Test Report



CTL/THOMPSON, INC.
CONSULTING GEOTECHNICAL
AND MATERIALS ENGINEERS

1971 WEST 12TH AVE., DENVER, CO 80204
(303) 825-0777

CLIENT:

PEPSI COLA BOTTLING CO OF DENVER
3801 BRIGHTON BOULEVARD
DENVER, COLORADO 80216
ATTN: MR. DON PATTON

DATE 09/27/85 JOB NO. 11870
REPORT NO. 24 SHEET 1 OF 1
SUBJECT PEPSI COLA ATHLETIC COMPLEX
3801 BRIGHTON BOULEVARD
FILL OBSERVATION

TEST NO.	LOCATION	DEPTH FEET	TEST TYPE	LABORATORY		FIELD			SOIL TYPE
				MAX DENSITY PCF	OMC %	DRY DENSITY PCF	MC %	COM-PACTATION %	

SPECIFICATIONS: _____ % OF MAXIMUM
MOISTURE WITHIN _____ % OF OPTIMUM
TYPE OF COMPACTION EQUIPMENT AND NO. OF UNITS:

MOISTURE ADDED BY _____
THICKNESS OF LIFT _____ INCHES
TYPE OF EARTH MOVING EQUIPMENT AND NO. OF UNITS:

THIS REPORT PRESENTS OPINIONS FORMED AS A RESULT OF OUR OBSERVATION OF FILL PLACEMENT, AS WELL AS THE TESTS SHOWN ABOVE. WE HAVE RELIED UPON THE CONTRACTOR TO APPLY THE NECESSARY COMPACTIVE EFFORT AND MOISTURE TO ACHIEVE SPECIFIED COMPACTION DURING TIMES WHEN OUR OBSERVER IS NOT PRESENT, AND AT LOCATIONS OTHER THAN THOSE TESTED. TEST DATA ARE NOT THE SOLE BASIS FOR OPINIONS ON WHETHER THE FILL MEETS SPECIFICATIONS.

PROGRESS REPORT AS REQUESTED BY THE CONTRACTOR A SITE VISIT WAS MADE TO OBSERVE THE PLACEMENT OF MINUS 12 INCH CRUSHED ROCK BENEATH PROPOSED CULVERT CONSTRUCTION FROM STATION 6+00 TO 7+00. PRIOR TO THIS VISIT THE CONTRACTOR HAD OVER EXCAVATED THIS AREA APPROXIMATELY 2 FEET AND BACKFILLED WITH 18 INCHES OF CRUSHED ROCK. THE FINAL 6 INCHES OF THE EXCAVATION WILL BE BACKFILLED WITH MINUS 6 INCH CRUSHED ROCK AND COMPACTED. WE SUGGESTED THE CONTRACTOR CONTACT US WHEN COMPACTION WAS IN PROGRESS TO OBSERVE THE STABILITY OF THE BASE MATERIAL.

IN OUR OPINION, FILL COMPACTION MEETS SPECIFICATIONS AS INDICATED BY OUR OBSERVATIONS AND TEST NO.(S)
IN OUR OPINION, FILL COMPACTION DOES NOT MEET SPECIFICATIONS AS INDICATED BY OUR OBSERVATIONS AND TEST NO.(S)
AND SHOULD BE REWORKED

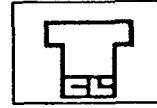
SCOPE OF OBSERVATION: ☐ FULL TIME; ☒ PERIODIC, ON CALL BASIS; ☒ CONTRACTOR'S OR CLIENT'S REPRESENTATIVE ADVISED

CTL/THOMPSON, INC.

DELMAR FISCHER
FIELD REPRESENTATIVE
DF:RS

APPROVED BY

RONALD M. MC OMBER P.E.



CTL/THOMPSON, INC.
CONSULTING GEOTECHNICAL
AND MATERIALS ENGINEERS

1971 WEST 12TH AVE., DENVER, CO 80204
(303) 825-0777

CLIENT: PEPSI COLA BOTTLING CO. OF DENVER
3801 BRIGHTON BOULEVARD
DENVER, COLORADO 80216

DATE: 10-4-85 JOB NO. 11870

REPORT NO. 25 SHEET 13 OF 1

SUBJECT

ATTN: MR. DON PATTON

PEPSI COLA PLANT
3801 BRIGHTON BOULEVARD
FILL OBSERVATION

[illegible]

SPECIFICATIONS: _____ **% OF MAXIMUM** _____

MOISTURE WITHIN _____ % OF OPTIMUM

TYPE OF COMPACTION EQUIPMENT AND NO. OF UNITS:

MOISTURE ADDED BY _____

THICKNESS OF LIFT _____ INCHES

TYPE OF EARTH MOVING EQUIPMENT AND NO. OF UNITS:

THIS REPORT PRESENTS OPINIONS FORMED AS A RESULT OF OUR OBSERVATION OF FILL PLACEMENT, AS WELL AS THE TESTS SHOWN ABOVE. WE HAVE RELIED UPON THE CONTRACTOR TO APPLY THE NECESSARY COMPACTIVE EFFORT AND MOISTURE TO ACHIEVE SPECIFIED COMPACTION DURING TIMES WHEN OUR OBSERVER IS NOT PRESENT, AND AT LOCATIONS OTHER THAN THOSE TESTED. TEST DATA ARE NOT THE SOLE BASIS FOR OPINIONS ON WHETHER THE FILL MEETS SPECIFICATIONS.

PROGRESS REPORT AS REQUESTED BY RON CARPENTER A SITE VISIT WAS MADE TO OBSERVE THE
PROOF-ROLLING OF MINUS 12-INCH CRUSHED ROCK FILL PLACED BENEATH PROPOSED BOX CULVERT.
THIS ROCK FILL APPEARED STABLE DURING THE PROOF-ROLLING. THE AREA OBSERVED WAS FROM
STATION 7+00 TO STATION 4+00.

☐ IN OUR OPINION, FILL COMPACTION MEETS SPECIFICATIONS AS INDICATED BY OUR OBSERVATIONS AND TEST NO.(S)

☐ IN OUR OPINION, FILL COMPACTION DOES NOT MEET SPECIFICATIONS AS INDICATED BY OUR OBSERVATIONS AND TEST NO.(S) _____

AND SHOULD BE REWORKED

SCOPE OF OBSERVATION: ☒ FULL TIME; ☐ PERIODIC, ON CALL BASIS; ☐ CONTRACTOR'S OR CLIENT'S REPRESENTATIVE ADVISED _____

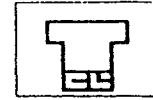
CTL/THOMPSON, INC.

DEL MAR FISCHER
FIELD REPRESENTATIVE

APPROVED BY

RONALD M. MC OMBER, P.E.

DF:PV



CTL/THOMPSON, INC.
CONSULTING GEOTECHNICAL AND MATERIALS ENGINEERS

October 22, 1985

Pepsi Cola Bottling Co. of Denver
3801 Brighton Boulevard
Denver, Colorado 80216

Attention: Mr. Don Patton

Subject: Statement of Substantial Conformance
Fill Operations
Pepsi Warehouse and Sports Facility Additions
and Box Culvert
Job Nos. 11,381 and 11,870

Gentlemen:

Our engineering technician was on site during the preparation of subgrade for the box culvert, during the excavation of existing fill in the Warehouse and Sports Facility additions, and during replacement of the fill by compacted soils. The scope of our work included part-time and full-time testing and inspection as requested by Reid Burton. The results of our tests have been reported under our Job No. 11,381 (reports 1 through 21) and Job No. 11,870 (reports 1 through 24). On the basis of our inspections and tests, we believe the fill placement was completed in substantial conformance with the recommendations contained within our reports for this project (Job No. 11,261 dated March 28, 1985 and Job No. 11,277 dated March 14, 1985).

Our firm will continue to test compaction of backfill for the culvert and Fructose Building foundations, as well as inspect footings and test concrete, on a part-time basis as you requested.

Please call if there are any questions regarding this statements.

Very truly yours,

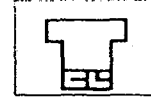
CTL/THOMPSON, INC.

By _____
Ronald M. McOmber, P.E.

RMM:dw

(3 copies sent)

1cc: Reid Burton
P.O. Box 905
Fort Collins, Colorado 80522



CTL/THOMPSON, INC.
CONSULTING GEOTECHNICAL AND MATERIALS ENGINEERS

August 15, 1985

Pepsi Cola Bottling Company of Denver
3801 Brighton Boulevard
Denver, Colorado 80216

Attention: Mr. Don Patton

Subject: Compaction Test Reports
Athletic Center
Pepsi-Cola Bottling Company
3801 Brighton Boulevard
Denver, Colorado
Job No. 11,870

Gentlemen:

On August 3, 5, 6 and 7, 1985, our field representative tested the placement of about 8 to 10 feet of fill in the railroad building area of the addition. On August 8, our Mr. McOmber visited the site because the fill was deforming. We watched the contractor roll the area with a loaded scraper and saw the fill deflect about 2 to 3 inches under wheel loads. The soil rebounded after the scraper passed.

The fill placed was a silty to clayey sand. We believe compaction of this material induced excess pore pressures in the sand. These pressures should dissipate over time. We believe the fill will stabilize within a week or so and that it has adequate density to support the proposed improvements. We recommend all traffic be kept off the fill for at least one week. The area should be proof-rolled with a loaded scraper or other heavy equipment to verify its stability prior to pouring footings or floor slabs.

Please call if you have questions regarding this discussion.

Very truly yours,

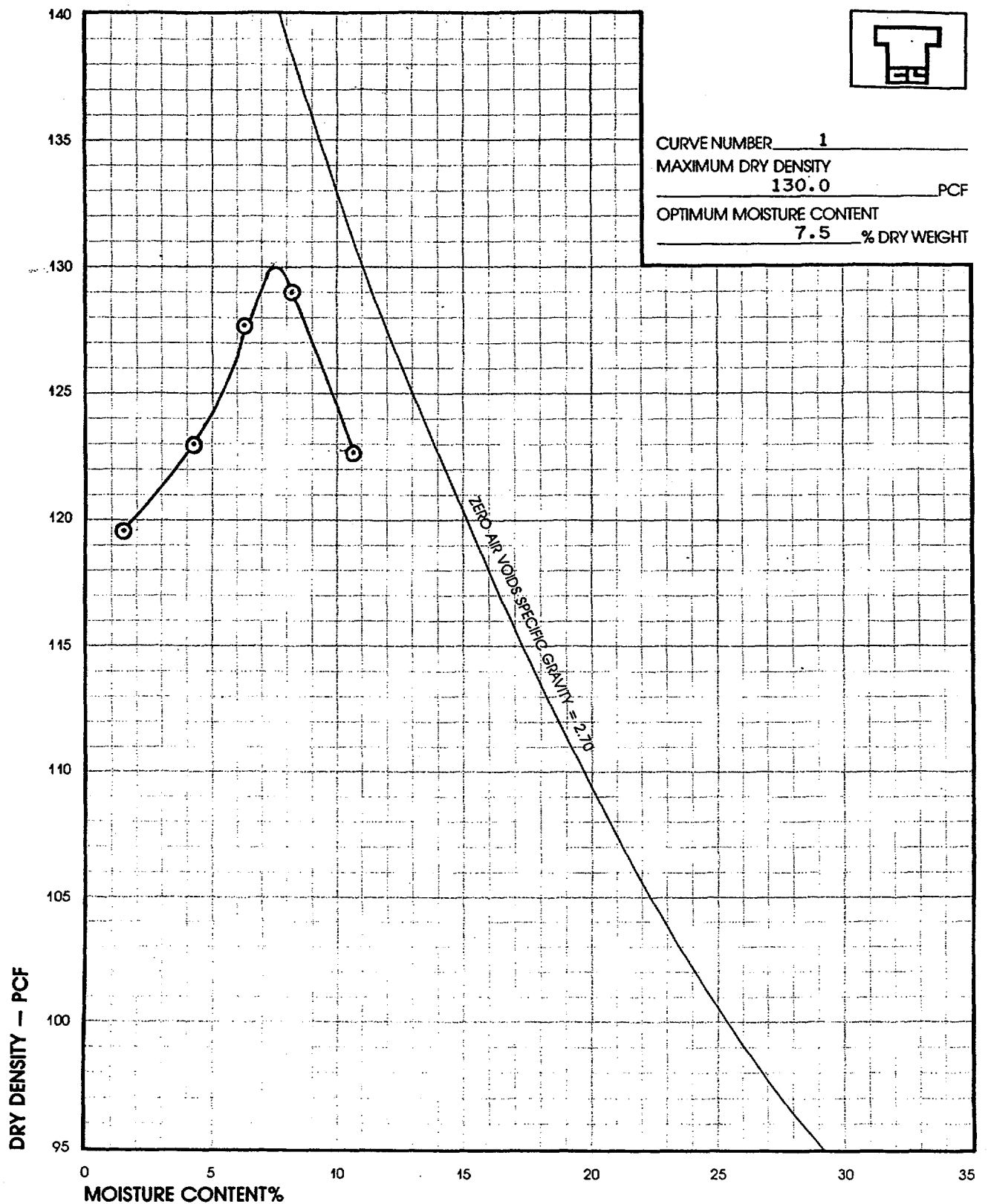
CTL/THOMPSON, INC.

By _____
Ronald M. McOmber, P.E.
Manager of Construction Services

RMM:gl
(3 copies sent)

Icc: Reid Burton Construction Company

Icc: Structural Consultants



Sample Description SAND, SILTY, GRAVELLY, BROWN

Location PEPSI PLANT - ATHLETIC CENTER
ON SITE MATERIALS

Compaction Test Procedure ASTM D 1557-78
METHOD 'C'

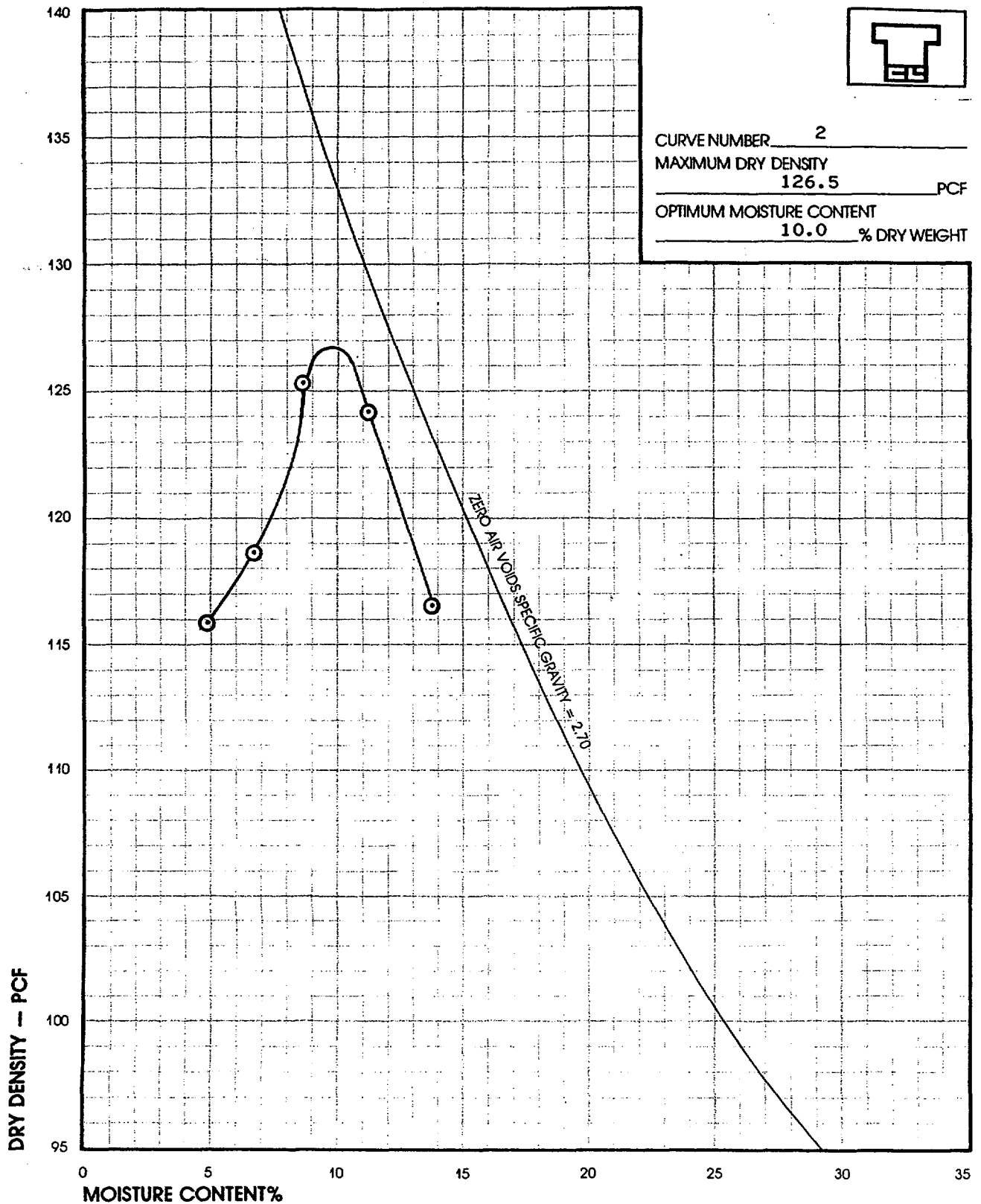
LIQUID LIMIT _____ %

PLASTICITY INDEX _____ %

GRAVEL _____ %

SAND _____ %

SILT AND CLAY _____ %



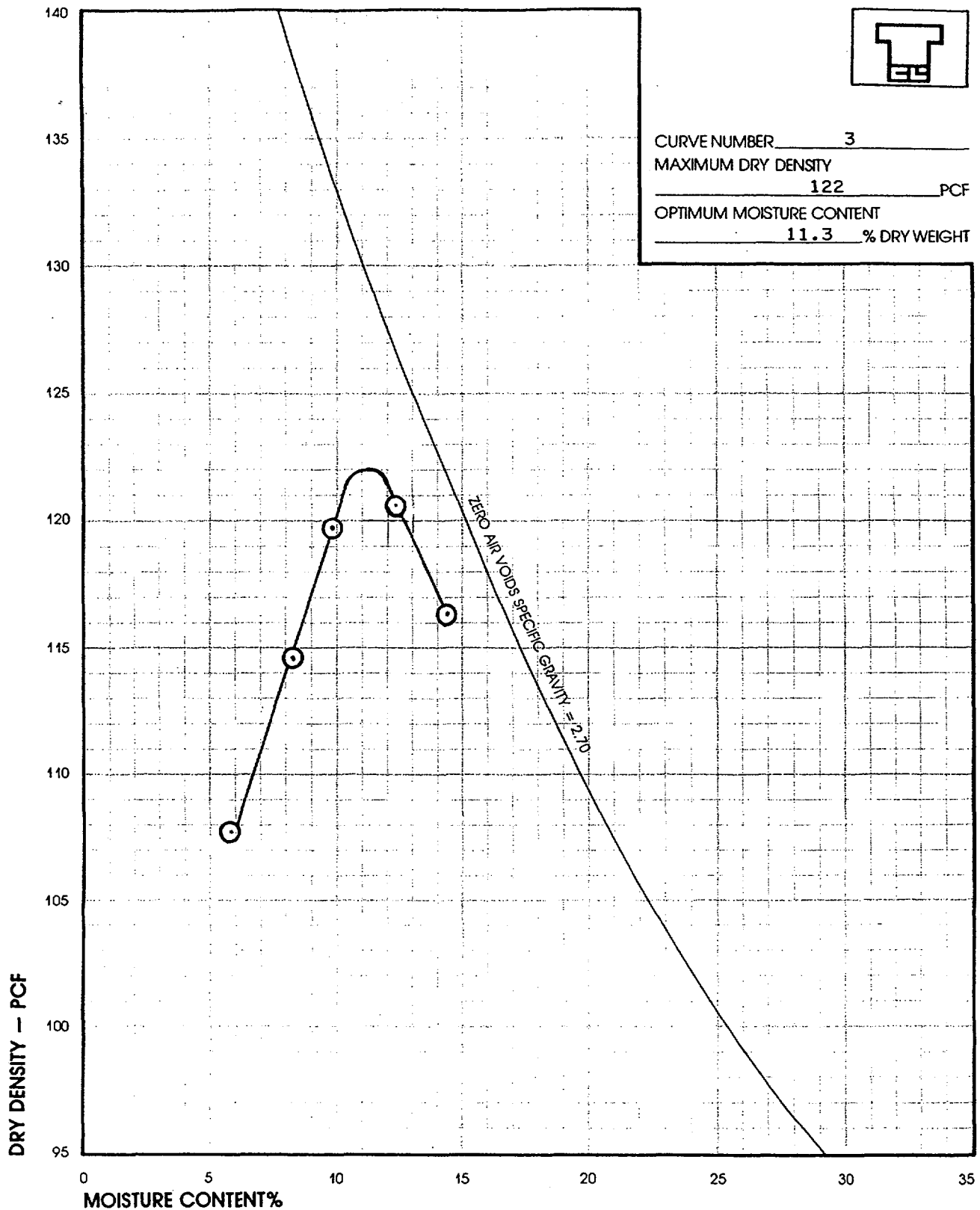
Sample Description SAND, SILTY, GRAVELLY, BROWN

Location PEPSI PLANT - ATHLETIC CENTER
ON SITE MATERIALS

Compaction Test Procedure ASTM D 1557-78
METHOD 'C'

LIQUID LIMIT _____ %
 PLASTICITY INDEX _____ %
 GRAVEL _____ %
 SAND _____ %
 SILT AND CLAY _____ %

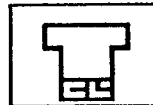
Compaction Test Results



Sample Description SAND, SLIGHTLY CLAYEY
GRAVELLY, BROWN
Location ON SITE — PEPSI ATHLETIC CENTER
Compaction Test Procedure ASTM D 1557-78
METHOD 'C'

LIQUID LIMIT _____ %
PLASTICITY INDEX _____ %
GRAVEL _____ %
SAND _____ %
SILT AND CLAY _____ %

Compaction Test Report



CTL/THOMPSON, INC.
CONSULTING GEOTECHNICAL
AND MATERIALS ENGINEERS
1971 WEST 12TH AVE., DENVER, CO 80204
(303) 825-0777

CLIENT: PEPSI COLA BOTTLING CO. OF DENVER
3801 BRIGHTON BOULEVARD
DENVER, COLORADO 80216

ATTN: MR. DON PATTON

DATE: 7-26-85 JOB NO. 11870
REPORT NO. 11 SHEET 1 OF 1
SUBJECT PEPSI COLA ATHLETIC COMPLEX
3801 BRIGHTON BLVD.
FILL OBSERVATION

TEST NO.	LOCATION	DEPTH FEET *	TEST TYPE	LABORATORY		FIELD			SOIL TYPE
				MAX DENSITY PCF	OMC %	DRY DENSITY PCF	MC %	COM-PACTION %	
27	200' NORTH OF SE CORNER LOADING DOCK	1.0	SAND	124.5	9.5	136	8.9	100	CURVE #1 JOB #11381
28	150' N & 50' W	1.0	SAND	124.5	9.5	123	10.3	99	
29	200' N & 50' W	2.0	SAND	122	11.0	116	7.5	95	
30	150' NORTH	2.0	SAND	122	11.0	126	9.7	100	
31	200' N & 30' W	4.0	SAND	124.5	9.5	130	8.8	100	
32	175' N & 15' W	6.0	SAND	122	11.0	134	6.6	100	
33	175' N & 40' W	7.0	SAND	124.5	9.5	134	6.6	100	
*	ABOVE NATURAL GRADE (FEET)								

SPECIFICATIONS: 95 % OF MAXIMUM ASTM D 1557
MOISTURE WITHIN ± 2 % OF OPTIMUM

TYPE OF COMPACTION EQUIPMENT AND NO. OF UNITS:

(1) SHEEPSFOOT COMPACTOR
(2) LOADED SCRAPERS

MOISTURE ADDED BY (1) WATER TRUCK

THICKNESS OF LIFT 4-6 INCHES

TYPE OF EARTH MOVING EQUIPMENT AND NO. OF UNITS:

(2) 621 SCRAPERS, (1) DOZER, (1) FRONT END LOADER

THIS REPORT PRESENTS OPINIONS FORMED AS A RESULT OF OUR OBSERVATION OF FILL PLACEMENT, AS WELL AS THE TESTS SHOWN ABOVE. WE HAVE RELIED UPON THE CONTRACTOR TO APPLY THE NECESSARY COMPACTION EFFORT AND MOISTURE TO ACHIEVE SPECIFIED COMPACTION DURING TIMES WHEN OUR OBSERVER IS NOT PRESENT, AND AT LOCATIONS OTHER THAN THOSE TESTED. TEST DATA ARE NOT THE SOLE BASIS FOR OPINIONS ON WHETHER THE FILL MEETS SPECIFICATIONS.

PROGRESS REPORT THE CONTRACTOR BEGAN EXCAVATION IN THE AREA DIRECTLY NORTH AND NORTH-EAST OF THE EXISTING LOADING DOCK. THE EXCAVATED MATERIAL WAS THEN PLACED AS FILL IN AN AREA APPROXIMATELY 150 TO 200 FEET NORTH OF THE EXISTING LOADING DOCK. THE EXCAVATED MATERIAL WAS PLACED ALTERNATELY IN LIFTS WITH A RED CLAY MATERIAL FROM A STOCKPILE DIRECTLY WEST OF THE EXISTING LOADING DOCK. THIS STOCKPILE MATERIAL WAS PLACING IN ONE FOOT LIFTS, ALTERNATING WITH TWO FOOT LIFTS OF THE MATERIAL EXCAVATED.

☒ IN OUR OPINION, FILL COMPACTION MEETS SPECIFICATIONS AS INDICATED BY OUR OBSERVATIONS AND TEST NO.(S) 27-33
☐ IN OUR OPINION, FILL COMPACTION DOES NOT MEET SPECIFICATIONS AS INDICATED BY OUR OBSERVATIONS AND TEST NO.(S)
AND SHOULD BE REWORKED

SCOPE OF OBSERVATION: ☒ FULL TIME; ☐ PERIODIC, ON CALL BASIS; ☒ CONTRACTOR'S OR CLIENT'S REPRESENTATIVE ADVISED

WILLIAM Y. KLETT, III

FIELD REPRESENTATIVE

CTL/THOMPSON, INC.

APPROVED BY

WK:PV

RONALD M. MC OMBER, P.E.

Compaction Test Report



CTL/THOMPSON, INC.
CONSULTING GEOTECHNICAL
AND MATERIALS ENGINEERS
1971 WEST 12TH AVE., DENVER, CO 80204
(303) 825-0777

CLIENT: PEPsi COLA BOTTLING CO. OF DENVER
3801 BRIGHTON BOULEVARD
DENVER, COLORADO 80216

DATE: 7-27-85 JOB. NO. 11870
REPORT NO. 12 SHEET 1 OF 1
SUBJECT PEPsi COLA ATHLETIC COMPLEX
3801 BRIGHTON BLVD.
FILL OBSERVATION

ATTN: MR. DON PATTON

TEST NO.	LOCATION	DEPTH FEET *	TEST TYPE	LABORATORY		FIELD			SOIL TYPE
				MAX DENSITY PCF	OMC %	DRY DENSITY PCF	MC %	COMPACTION %	
34	125'N & 20'W OF SE CORNER OF LOADING DOCK	4.0	SAND	122	11.0	125	7.8	100	CURVE #3
35	110'N & 25'W	5.0	SAND	124.5	9.5	121	8.8	97	CURVE #1 JOB #11381
36	200'N & 15'W	9.0	SAND	122	11.0	128	9.1	100	CURVE #3
37	80'N & 10'W	**7.0	SAND	124.5	9.5	124	8.3	100	CURVE #1 JOB #11381
38	60'NORTH	**5.0	SAND	122	11.0	127	9.3	100	CURVE #3
39	40'NORTH	**2.0	SAND	122	11.0	119	10.1	98	" "
40	30'N & 30'E	**0.0	SAND	122	11.0	125	9.8	100	" "
*	ABOVE NATURAL GRADE (FEET)								

SPECIFICATIONS: 95 % OF MAXIMUM ASTM D 1557-78
MOISTURE WITHIN + OR - 2 % OF OPTIMUM

TYPE OF COMPACTION EQUIPMENT AND NO. OF UNITS:

(1) SHEEPSFOOT COMPACTOR

(2) LOADED SCRAPERS

MOISTURE ADDED BY (1) WATER TRUCK

THICKNESS OF LIFT 4-6 INCHES

TYPE OF EARTH MOVING EQUIPMENT AND NO. OF UNITS:

(2) 621 SCRAPERS, (1) DOZER, (1) FRONT END
LOADER

PROGRESS REPORT EXCAVATION WAS COMPLETED IN THE AREA DIRECTLY NORTH AND NORTH EAST OF THE EXISTING LOADING DOCK. FILL WAS THEN PLACED IN THIS AREA USING THE RED, CLAY MATERIAL FROM THE STOCKPILE DIRECTLY WEST OF THE EXISTING LOADING DOCK, AND MATERIAL STOCKPILED FROM EARLIER EXCAVATION WORK. THIS AREA WAS FILLED IN ALTERNATING LIFTS OF THESE TWO MATERIALS, AND WAS BROUGHT UP TO FINISHED GRADE.

☒ IN OUR OPINION, FILL COMPACTION MEETS SPECIFICATIONS AS INDICATED BY OUR OBSERVATIONS AND TEST NO.(S) 34-40

☐ IN OUR OPINION, FILL COMPACTION DOES NOT MEET SPECIFICATIONS AS INDICATED BY OUR OBSERVATIONS AND TEST NO.(S)

AND SHOULD BE REWORKED

SCOPE OF OBSERVATION: ☒ FULL TIME; ☐ PERIODIC, ON CALL BASIS; ☒ CONTRACTOR'S OR CLIENT'S REPRESENTATIVE ADVISED

WILLIAM Y. KLETT, III
FIELD REPRESENTATIVE WK:PV

CTL/THOMPSON, INC.

APPROVED BY

RONALD M. MC OMBER, P.E.



CTL/THOMPSON, INC.
CONSULTING GEOTECHNICAL
AND MATERIALS ENGINEERS

1971 WEST 12TH AVE., DENVER, CO 80204
(303) 825-0777

CLIENT: PEPSI COLA BOTTLING CO. OF DENVER
3801 BRIGHTON BOULEVARD
DENVER, COLORADO 80216

DATE: 7-29-85 JOB NO. 11870
REPORT NO. 13 SHEET 1 OF 1
SUBJECT PEPSI COLA ATHLETIC COMPLEX
3801 BRIGHTON BLVD.
FILL OBSERVATION

ATTN: MR. DON PATTON

TEST NO.	LOCATION	DEPTH FEET *	TEST TYPE	LABORATORY		FIELD			SOIL TYPE
				MAX DENSITY PCF	OMC %	DRY DENSITY PCF	MC %	COMPACTION %	
41	200'N & 150'W OF SE CORNER OF LOADING DOCK	9.0	SAND	130	7.5	127	10.1	98	CURVE #1
42	200'N & 120'W OF SE CORNER OF LOADING DOCK	6.0	SAND	122	11.0	121	6.7	99	" "
*	BELOW GRADE								

SPECIFICATIONS: 95 % OF MAXIMUM ASTM D 1557-78
MOISTURE WITHIN + OR - 2 % OF OPTIMUM

TYPE OF COMPACTION EQUIPMENT AND NO. OF UNITS:

(1) SHEEPSFOOT COMPACTOR

MOISTURE ADDED BY (1) WATER TRUCK
THICKNESS OF LIFT 4-6 INCHES

TYPE OF EARTH MOVING EQUIPMENT AND NO. OF UNITS:

(1) 621 SCRAPER, (1) FRONT END LOADER,

THIS REPORT PRESENTS OPINIONS FORMED AS A RESULT OF OUR OBSERVATION OF FILL PLACEMENT, AS WELL AS THE TESTS SHOWN ABOVE. WE HAVE RELIED UPON THE CONTRACTOR TO APPLY THE NECESSARY COMPACTIVE EFFORT AND MOISTURE TO ACHIEVE SPECIFIED COMPACTION DURING TIMES WHEN OUR OBSERVER IS NOT PRESENT, AND AT LOCATIONS OTHER THAN THOSE TESTED. TEST DATA ARE NOT THE SOLE BASIS FOR OPINIONS ON WHETHER THE FILL MEETS SPECIFICATIONS.

PROGRESS REPORT THE CONTRACTOR CONCENTRATED EFFORTS ON EXCAVATION OF THE AREA 300 FEET NORTH OF THE EXISTING LOADING DOCK. FILL WAS PLACED IN AN AREA 200 FEET NORTH AND APPROXIMATELY 125 FEET WEST OF THE LOADING DOCK. THIS AREA WAS BROUGHT UP TO THE SAME ELEVATION AS THE ADJACENT BUILDING PADS.

7 IN OUR OPINION, FILL COMPACTION MEETS SPECIFICATIONS AS INDICATED BY OUR OBSERVATIONS AND TEST NO.(S) 41-42

☐ IN OUR OPINION, FILL COMPACTION DOES NOT MEET SPECIFICATIONS AS INDICATED BY OUR OBSERVATIONS AND TEST NO.(S) _____ AND SHOULD BE REWORKED

SCOPE OF OBSERVATION: ☒ FULL TIME; ☐ PERIODIC, ON CALL BASIS; ☐ CONTRACTOR'S OR CLIENT'S REPRESENTATIVE ADVISED _____

CTL/THOMPSON, INC.

WILLIAM Y. KLETT, III
FIELD REPRESENTATIVE

APPROVED BY RONALD M. MC OMBER, P.E.

/K:Pv

Compaction Test Report



CTL/THOMPSON, INC.
CONSULTING GEOTECHNICAL
AND MATERIALS ENGINEERS

1971 WEST 12TH AVE., DENVER, CO 80204
(303) 825-0777

CLIENT: PEPSI COLA BOTTLING CO. OF DENVER
3801 BRIGHTON BOULEVARD
DENVER, COLORADO 80216
ATT: MR. DON PATTON

DATE: 07/31/85 JOB NO. 11870
REPORT NO. 15 SHEET 1 OF 1
SUBJECT PEPSI COLA ATHLETIC COMPLEX
3801 BRIGHTON BOULEVARD
FILL OBSERVATION

TEST NO.	LOCATION	DEPTH FEET	TEST TYPE	LABORATORY		FIELD			SOIL TYPE
				MAX DENSITY PCF	OMC %	DRY DENSITY PCF	MC %	COMPACTION %	
	FROM N.W. CORNER OF BLDG. AREA								
43	ON STOCKPILE 200' W. 200' N.		SAND	118	11.5	106	22.7	90	CURVE #4 JOB #11381
44	ON STOCKPILE 225' W. 150' N.		SAND	118	11.5	99	22.7	84	
45	ON STOCKPILE 200' W. 100' N.		SAND	118	11.5	100	22.7	85	
46	ON STOCKPILE 225' W. 75' N.		SAND	118	11.5	100	22.7	85	
47	ON STOCKPILE 200' W. 25' S.		SAND	118	11.5	110	22.7	85	
48	ON STOCKPILE 225' W. 50' S.		SAND	118	11.5	92	22.7	78	

SPECIFICATIONS: _____ % OF MAXIMUM _____
MOISTURE WITHIN _____ % OF OPTIMUM

TYPE OF COMPACTION EQUIPMENT AND NO. OF UNITS:

MOISTURE ADDED BY _____

THICKNESS OF LIFT _____ INCHES

TYPE OF EARTH MOVING EQUIPMENT AND NO. OF UNITS:

THIS REPORT PRESENTS OPINIONS FORMED AS A RESULT OF OUR OBSERVATION OF FILL PLACEMENT, AS WELL AS THE TESTS SHOWN ABOVE. WE HAVE RELIED UPON THE CONTRACTOR TO APPLY THE NECESSARY COMPACTION EFFORT AND MOISTURE TO ACHIEVE SPECIFIED COMPACTION DURING TIMES WHEN OUR OBSERVER IS NOT PRESENT, AND AT LOCATIONS OTHER THAN THOSE TESTED. TEST DATA ARE NOT THE SOLE BASIS FOR OPINIONS ON WHETHER THE FILL MEETS SPECIFICATIONS.

PROGRESS REPORT DUE TO EXCESSIVE MOISTURE, THE CONTRACTOR WAS NOT ABLE TO EXCAVATE OR PLACE FILL MATERIAL. AS REQUESTED BY RON CARPENTER OF REID BURTON CONSTRUCTION, OUR FIELD ENGINEER PERFORMED DENSITY TESTS ON THE STOCKPILE IN THE NORTHWESTERN CORNER OF THE SITE. ADDITIONAL ROCK WAS PLACED ALONG THE NORTHERN SIDE OF THE DRAINAGE CULVERT.

☐ IN OUR OPINION, FILL COMPACTION MEETS SPECIFICATIONS AS INDICATED BY OUR OBSERVATIONS AND TEST NO.(S) _____

☐ IN OUR OPINION, FILL COMPACTION DOES NOT MEET SPECIFICATIONS AS INDICATED BY OUR OBSERVATIONS AND TEST NO.(S) _____

AND SHOULD BE REWORKED

SCOPE OF OBSERVATION: ☐ FULL TIME; ☐ PERIODIC, ON CALL BASIS; ☐ CONTRACTOR'S OR CLIENT'S REPRESENTATIVE ADVISED _____

CTL/THOMPSON, INC.

WILLIAM Y. KLETT III
FIELD REPRESENTATIVE

APPROVED BY
RONALD M. MC OMBER P.E.



CTL/THOMPSON, INC.
CONSULTING GEOTECHNICAL
AND MATERIALS ENGINEERS

1971 WEST 12TH AVE., DENVER, CO 80204
(303) 825-0777

CLIENT: PEPSI COLA BOTTLING CO. OF DENVER

3801 BRIGHTON BOULEVARD
DENVER, COLORADO 80216
ATT: MR. DON PATTON

DATE: 08/02/85 JOB. NO. 11870

REPORT NO. 17 SHEET 1 OF 1

SUBJECT PEPSI COLA ATHLETIC COMPLEX
3801 BRIGHTON BOULEVARD
FILL OBSERVATION

TEST NO.	LOCATION	DEPTH FEET	TEST TYPE	LABORATORY		FIELD			SOIL TYPE
				MAX DENSITY PCF	OMC %	DRY DENSITY PCF	MC %	COM-PACTION %	
49.	80' N. OF S.E. CORNER OF EXISTING LOADING DOCK	2.0	SAND	118	11.5	127	8.6	100+	CURVE #4 JOB #11381
*	ABOVE GRADE								

SPECIFICATIONS: _____ % OF MAXIMUM _____

MOISTURE WITHIN _____ % OF OPTIMUM

TYPE OF COMPACTION EQUIPMENT AND NO. OF UNITS:

1) SHEEPSFOOT COMPACTOR

MOISTURE ADDED BY WATER TRUCK

THICKNESS OF LIFT 4-6 INCHES

TYPE OF EARTH MOVING EQUIPMENT AND NO. OF UNITS:

1)BLADE 1) 621 SCRAPER 1)DOZER

THIS REPORT PRESENTS OPINIONS FORMED AS A RESULT OF OUR OBSERVATION OF FILL PLACEMENT, AS WELL AS THE TESTS SHOWN ABOVE. WE HAVE RELIED UPON THE CONTRACTOR TO APPLY THE NECESSARY COMPACTIVE EFFORT AND MOISTURE TO ACHIEVE SPECIFIED COMPACTION DURING TIMES WHEN OUR OBSERVER IS NOT PRESENT, AND AT LOCATIONS OTHER THAN THOSE TESTED. TEST DATA ARE NOT THE SOLE BASIS FOR OPINIONS ON WHETHER THE FILL MEETS SPECIFICATIONS.

PROGRESS REPORT THE CONTRACTOR PLACED APPROXIMATELY 4 INCHES OF FILL IN AN EXCAVATED AREA LOCATED 300 FEET NORTH OF EXISTING LOADING DOCK. ADDITIONAL FILL WAS PLACED IN AN AREA ADJACENT TO LOADING DOCK AND COMPACTED. THE CONTRACTOR BEGAN PLACEMENT OF 6 INCHES OF ROAD BASE ON THE SUBGRADE ADJACENT TO THE LOADING DOCK.

☒ IN OUR OPINION, FILL COMPACTION MEETS SPECIFICATIONS AS INDICATED BY OUR OBSERVATIONS AND TEST NO.(S) 49

☐ IN OUR OPINION, FILL COMPACTION DOES NOT MEET SPECIFICATIONS AS INDICATED BY OUR OBSERVATIONS AND TEST NO.(S)

AND SHOULD BE REWORKED

SCOPE OF OBSERVATION: ☒ FULL TIME: ☐ PERIODIC, ON CALL BASIS: ☒ CONTRACTOR'S OR CLIENT'S REPRESENTATIVE ADVISED

WILLIAM Y. KLETT III

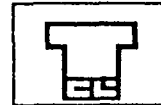
CTL/THOMPSON, INC.

FIELD REPRESENTATIVE

APPROVED BY **RONALD M. MC OMBER P.E.**

WYK:RS

Compaction Test Report



CTL/THOMPSON, INC.
CONSULTING GEOTECHNICAL
AND MATERIALS ENGINEERS
1971 WEST 12TH AVE., DENVER, CO 80204
(303) 825-0777

CLIENT:

PEPSI COLA BOTTLING CO. OF DENVER
3801 BRIGHTON BOULEVARD
DENVER, COLORADO 80216
ATT: MR. DON PATTON

DATE: 08/03/85 JOB NO. 11870
REPORT NO. 18 SHEET 1 OF 2
SUBJECT PEPSI COLA ATHLETIC COMPLEX
3801 BRIGHTON BOULEVARD
FILL OBSERVATION

TEST NO.	LOCATION	DEPTH FEET *	TEST TYPE	LABORATORY		FIELD			SOIL TYPE
				MAX DENSITY PCF	OMC %	DRY DENSITY PCF	MC %	COM-PACTION %	
50	84' S. 12 E. FROM N.W. CORNER OF BLDG	10.0	NUC	122	11.0	126	7.5	100+	CURVE #3
51	20' S. 10' E. FROM N.W. CORNER OF BLDG.	8.0	NUC	122	11.0	126	9.1	100+	" "
52	15' S. 10' W. FROM N.W. CORNER OF BLDG.	6.0	NUC	122	11.0	121	10.4	99	" "
53	60' S. 20' W. FROM N.E. CORNER OF BLDG.	8.0	NUC	122	11.0	124	9.3	100+	" "
54	56' S. ON CL. FROM N.E. CORNER OF BLDG.	10.0	NUC	122	11.0	123	8.3	100	" "
55	28' S. 9' W. FROM N.E. CORNER OF BLDG.	10.0	NUC	122	11.0	123	9.1	100	" "
56	85' S. 10' W. FROM N.E. CORNER OF BLDG.	8.0	NUC	122	11.0	122	9.2	100	" "
57	15' E. FROM N.E. CORNER OF BLDG.	6.0	NUC	122	11.0	123	12.4	100	" "

*BELOW GRADE

SPECIFICATIONS: 95 % OF MAXIMUM ASTM D-1557-78
MOISTURE WITHIN 2 % OF OPTIMUM

TYPE OF COMPACTION EQUIPMENT AND NO. OF UNITS:

1) SHEEPSFOOT COMPACTOR 1) RUBERTIRE ROLLER

MOISTURE ADDED BY 1) WATER TRUCK

THICKNESS OF LIFT 12 INCHES

TYPE OF EARTH MOVING EQUIPMENT AND NO. OF UNITS:

1) GRADER 1) DOZER 1) SCRAPER

THIS REPORT PRESENTS OPINIONS FORMED AS A RESULT OF OUR OBSERVATION OF FILL PLACEMENT, AS WELL AS THE TESTS SHOWN ABOVE. WE HAVE RELIED UPON THE CONTRACTOR TO APPLY THE NECESSARY COMPACTION EFFORT AND MOISTURE TO ACHIEVE SPECIFIED COMPACTION DURING TIMES WHEN OUR OBSERVER IS NOT PRESENT, AND AT LOCATIONS OTHER THAN THOSE TESTED. TEST DATA ARE NOT THE SOLE BASIS FOR OPINIONS ON WHETHER THE FILL MEETS SPECIFICATIONS.

PROGRESS REPORT DURING THIS SITE VISIT THE CONTRACTOR WAS PLACING AND COMPACTING FILL MATERIAL IN 'D' SECTION ON THE EAST END OF PROPOSED BUILDING.

☒ IN OUR OPINION, FILL COMPACTION MEETS SPECIFICATIONS AS INDICATED BY OUR OBSERVATIONS AND TEST NO.(S) 50-58

☐ IN OUR OPINION, FILL COMPACTION DOES NOT MEET SPECIFICATIONS AS INDICATED BY OUR OBSERVATIONS AND TEST NO.(S)

AND SHOULD BE REWORKED

SCOPE OF OBSERVATION: ☐ FULL TIME; ☒ PERIODIC, ON CALL BASIS; ☒ CONTRACTOR'S OR CLIENT'S REPRESENTATIVE ADVISED JOB FOREMAN

JIM CARETTO

FIELD REPRESENTATIVE

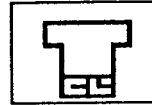
JC:RS

CTL/THOMPSON, INC.

APPROVED BY

RONALD M. MC OMBER P.E.

Compaction Test Report



CTL/THOMPSON, INC.
CONSULTING GEOTECHNICAL
AND MATERIALS ENGINEERS

1971 WEST 12TH AVE., DENVER, CO 80204
(303) 825-0777

CLIENT:

PEPSI COLA BOTTLING CO. OF DENVER
3801 BRIGHTON BOULEVARD
DENVER, COLORADO 80216
ATT: MR DON PATTON

DATE: 08/03/85 JOB NO. 11870

REPORT NO. 18 SHEET 2 OF 2

SUBJECT PEPSI COLA ATHLETIC COMPLEX
3801 BRIGHTON BOULEVARD
FILL OBSERVATION

TEST NO.	LOCATION	DEPTH FEET *	TEST TYPE	LABORATORY		FIELD			SOIL TYPE
				MAX DENSITY PCF	OMC %	DRY DENSITY PCF	MC %	COM-PACTION %	
	NORTH EAST CORNER OF BLDG.								
58	50' S. 5' E. FROM N.E. CORNER OF BLDG. EXCAVATION	6.0	NUC	122	11.0	119	9.5	98	CURVE #3
*	BELOW GRADE								

SPECIFICATIONS: 95 % OF MAXIMUM ASTM D-1557-78

MOISTURE WITHIN 2 % OF OPTIMUM

TYPE OF COMPACTION EQUIPMENT AND NO. OF UNITS:

1) SHEEPSFOOT 1) RUBBERTIRE ROLLER

MOISTURE ADDED BY 1) WATER TRUCK

THICKNESS OF LIFT 12 INCHES

TYPE OF EARTH MOVING EQUIPMENT AND NO. OF UNITS:

1) GRADER 1) DOZER 1) SCRAPER

THIS REPORT PRESENTS OPINIONS FORMED AS A RESULT OF OUR OBSERVATION OF FILL PLACEMENT, AS WELL AS THE TESTS SHOWN ABOVE. WE HAVE RELIED UPON THE CONTRACTOR TO APPLY THE NECESSARY COMPACTIVE EFFORT AND MOISTURE TO ACHIEVE SPECIFIED COMPACTION DURING TIMES WHEN OUR OBSERVER IS NOT PRESENT, AND AT LOCATIONS OTHER THAN THOSE TESTED. TEST DATA ARE NOT THE SOLE BASIS FOR OPINIONS ON WHETHER THE FILL MEETS SPECIFICATIONS.

PROGRESS REPORT THE CONTRACTOR CONTINUED PLACEMENT AND COMPACTION OF FILL MATERIAL IN 'D' SECTION ON THE EAST END OF PROPOSED BUILDING.

☒ IN OUR OPINION, FILL COMPACTION MEETS SPECIFICATIONS AS INDICATED BY OUR OBSERVATIONS AND TEST NO.(S) 50-58

☐ IN OUR OPINION, FILL COMPACTION DOES NOT MEET SPECIFICATIONS AS INDICATED BY OUR OBSERVATIONS AND TEST NO.(S)

AND SHOULD BE REWORKED

SCOPE OF OBSERVATION: ☐ FULL TIME; ☒ PERIODIC, ON CALL BASIS; ☒ CONTRACTOR'S OR CLIENT'S REPRESENTATIVE ADVISED JOB FOREMAN

CTL/THOMPSON, INC.

JIM CARETTO

FIELD REPRESENTATIVE

APPROVED BY

RONALD M. MC OMBER P.E.

JC:RS

JC:RS

Compaction Test Report



CTL/THOMPSON, INC.
CONSULTING GEOTECHNICAL
AND MATERIALS ENGINEERS

1971 WEST 12TH AVE., DENVER, CO 80204
(303) 825-0777

CLIENT:
PEPSI COLA BOTTLING CO. OF DENVER
3801 BRIGHTON BOULEVARD
DENVER, COLORADO 80216
ATT: MR DON PATTON

DATE: 08/06/85 JOB NO. 11870
REPORT NO. 20 SHEET 1 OF 1
SUBJECT PEPSI COLA ATHLETIC COMPLEX
3801 BRIGHTON BOULEVARD
FILL OBSERVATION

TEST NO.	LOCATION	DEPTH FEET *	TEST TYPE	LABORATORY		FIELD			SOIL TYPE
				MAX DENSITY PCF	OMC %	DRY DENSITY PCF	MC %	COMPACTION %	
63	2' N. 10' E. FROM S.W. CORNER OF 'E' SECTION	2.0	NUC	122	11.0	121	9.6	99	CURVE #3
64	2' N. 2' E. FROM S.W. CORNER OF 'E' SECTION	2.0	NUC	122	11.0	123	9.6	100	"
65	30' S ON CL. OF 'E' SECTION	0.0	NUC	122	11.0	122	11.0	100	"
66	45' W 25' E. OF 'E' SECTION	0.0	NUC	122	11.0	122	11.0	100	"
67	10' S. 10' E. OF 'E' SECTION	0.0	NUC	122	11.0	121	11.0	99	"
*	BELOW GRADE								

SPECIFICATIONS: 95 % OF MAXIMUM ASTM D- 1557-78

MOISTURE WITHIN 2 % OF OPTIMUM

TYPE OF COMPACTION EQUIPMENT AND NO. OF UNITS:

1) SHEEPSFOOT

MOISTURE ADDED BY 1) WATER TRUCK

THICKNESS OF LIFT 18-24 INCHES

TYPE OF EARTH MOVING EQUIPMENT AND NO. OF UNITS:

1) GRADER 1) LOADER 1) SCRAPER

THIS REPORT PRESENTS OPINIONS FORMED AS A RESULT OF OUR OBSERVATION OF FILL PLACEMENT, AS WELL AS THE TESTS SHOWN ABOVE. WE HAVE RELIED UPON THE CONTRACTOR TO APPLY THE NECESSARY COMPACTIVE EFFORT AND MOISTURE TO ACHIEVE SPECIFIED COMPACTION DURING TIMES WHEN OUR OBSERVER IS NOT PRESENT, AND AT LOCATIONS OTHER THAN THOSE TESTED. TEST DATA ARE NOT THE SOLE BASIS FOR OPINIONS ON WHETHER THE FILL MEETS SPECIFICATIONS.

PROGRESS REPORT THE CONTRACTOR CONTINUED FILL PLACMENT IN THE 'E' SECTION OF BUILDING EXCAVATION.

☒ IN OUR OPINION, FILL COMPACTION MEETS SPECIFICATIONS AS INDICATED BY OUR OBSERVATIONS AND TEST NO.(S) 63-67

☐ IN OUR OPINION, FILL COMPACTION DOES NOT MEET SPECIFICATIONS AS INDICATED BY OUR OBSERVATIONS AND TEST NO.(S)

AND SHOULD BE REWORKED

SCOPE OF OBSERVATION: ☐ FULL TIME; ☒ PERIODIC, ON CALL BASIS; ☒ CONTRACTOR'S OR CLIENT'S REPRESENTATIVE ADVISED MIKE KRAUSE

CTL/THOMPSON, INC.

JIM CARETTO
FIELD REPRESENTATIVE

APPROVED BY RONALD M. MC OMBER P.E.

JC:RS



CTL/THOMPSON, INC.
CONSULTING GEOTECHNICAL
AND MATERIALS ENGINEERS

1971 WEST 12TH AVE., DENVER, CO 80204
(303) 825-0777

CLIENT:
PEPSI COLA BOTTLING CO. OF DENVER
3801 BRIGHTON BOULEVARD
DENVER, COLORADO 80216
ATT: MR. DON PATTON

DATE: 08/07/85 JOB. NO. 11870
REPORT NO. 21 SHEET 1 OF 1
SUBJECT PEPSI COLA ATHLETIC COMPLEX
3801 BRIGHTON BOULEVARD
FILL OBSERVATION

TEST NO.	LOCATION	DEPTH FEET	TEST TYPE	LABORATORY		FIELD			SOIL TYPE
				MAX DENSITY PCF	OMC %	DRY DENSITY PCF	MC %	COM-PACTION %	
68	15' W. 20' N. FROM S.E. CORNER OF BLDG. EXCAVATION	*		**					SAND GRAVELLY
		5.0	NUC	132	8.0	128	6.6	97	
69	30' W. 40' N. FROM S.E. CORNER OF BLDG. EXCAVATION			**					"
		5.0	NUC	132	8.0	127	7.8	96	
70	25' E. 15' N. FROM S.E. CORNER OF BLDG EXCAVATION								CURVE #3
		3.0	NUC	122	11.0	124	9.1	100+	
71	30' W. 15' N. FROM S.E. CORNER OF BLDG. EXCAVATION								CURVE #3
		3.0	NUC	122	11.0	123	10.2	100	
72	25' W. 5' N. FROM S.E. CORNER OF BLDG. EXCAVATION			**					SAND, GRAVELLY
		1.0	NUC	132	8.0	126	6.3	95	
73	W. 10' N. FROM S.E CORNER OF BLDG. EXCAVATION			**					"
		1.0	NUC	132	8.0	127	6.4	96	
* **	BELOW GRADE MAXIMUM DENSITY ESTIMATED BASE UPON A ONE-POINT STANDARD PROCTOR.								

SPECIFICATIONS: 95 % OF MAXIMUM ASTM D-1557-78
MOISTURE WITHIN 2 % OF OPTIMUM

TYPE OF COMPACTION EQUIPMENT AND NO. OF UNITS:

1) SHEEPSFOOT ROLLER

MOISTURE ADDED BY 1) WATER TRUCK

THICKNESS OF LIFT 6-12 INCHES

TYPE OF EARTH MOVING EQUIPMENT AND NO. OF UNITS:

1)GRADER 1)SCRAPER 1)DOZER

THIS REPORT PRESENTS OPINIONS FORMED AS A RESULT OF OUR OBSERVATION OF FILL PLACEMENT, AS WELL AS THE TESTS SHOWN ABOVE. WE HAVE RELIED UPON THE CONTRACTOR TO APPLY THE NECESSARY COMPACTIVE EFFORT AND MOISTURE TO ACHIEVE SPECIFIED COMPACTION DURING TIMES WHEN OUR OBSERVER IS NOT PRESENT, AND AT LOCATIONS OTHER THAN THOSE TESTED. TEST DATA ARE NOT THE SOLE BASIS FOR OPINIONS ON WHETHER THE FILL MEETS SPECIFICATIONS

PROGRESS REPORT DURING THE OVER EXCAVATION IN THE EAST PORTION OF THE PROPOSED BUILDING
GROUND WATER WAS ENCOUNTERED NEAR THE BOTTOM OF THE EXCAVATION. THIS AREA WAS
STABILIZED WITH 6 TO 8 INCHES OF CRUSHED ROCK PRIOR TO FILL PLACEMENT. THE CONTRACTOR
CONTINUED FILL PLACEMENT IN THE EAST PORTION OF BUILDING EXCAVATION.

☒ IN OUR OPINION, FILL COMPACTION MEETS SPECIFICATIONS AS INDICATED BY OUR OBSERVATIONS AND TEST NO.(S) 68-73

☐ IN OUR OPINION, FILL COMPACTION DOES NOT MEET SPECIFICATIONS AS INDICATED BY OUR OBSERVATIONS AND TEST NO.(S) _____

AND SHOULD BE REWORKED

SCOPE OF OBSERVATION: ☐ FULL TIME; ☒ PERIODIC, ON CALL BASIS; ☒ CONTRACTOR'S OR CLIENT'S REPRESENTATIVE ADVISED MIKE KRAUSE

CTL/THOMPSON, INC.

JIM CARETTO
FIELD REPRESENTATIVE

APPROVED BY **RONALD M. MC OMBER P.E.**

JD:RS

Compaction Test Report



CTL/THOMPSON, INC.
CONSULTING GEOTECHNICAL
AND MATERIALS ENGINEERS

1971 WEST 12TH AVE. DENVER, CO 80204
(303) 825-0777

CLIENT:

PEPSI COLA BOTTLING CO. OF DENVER
3801 BRIGHTON BOULEVARD
DENVER, COLORADO 80216

DATE: 08/08/85

JOB NO. 11870

REPORT NO. 22

SHEET 1 OF 1

SUBJECT: PEPSI COLA ATHLETIC COMPLEX
3801 BRIGHTON BOULEVARD
FILL OBSERVATION

TEST NO.	LOCATION	DEPTH FEET	TEST TYPE	LABORATORY		FIELD			SOIL TYPE
				MAX DENSITY PCF **	OMC %	DRY DENSITY PCF	MC %	COM-PACTATION %	
74	30' W. 15' N. FROM S.W. CORNER OF BLDG.EXCAVATION	0.6	NUC	132	8.0	126	6.8	96	SAND, GRAVELLY
75	5' W. 10' N. FROM S.E. CORNER OF BLDG.EXCAVATION	0.6	NUC	132	8.0	127	7.1	96	" "
76	5' W. 25' N. FROM S.E. CORNER OF BLDG.EXCAVATION	0.6	NUC	132	8.0	127	6.2	96	" "
*	BELOW GRADE								

SPECIFICATIONS: 95 % OF MAXIMUM ASTM D-1557-78
MOISTURE WITHIN 2 % OF OPTIMUM

TYPE OF COMPACTION EQUIPMENT AND NO. OF UNITS:

1) SHEEPSFOOT

MOISTURE ADDED BY 1) WATER TRUCK

THICKNESS OF LIFT 6-12 INCHES

TYPE OF EARTH MOVING EQUIPMENT AND NO. OF UNITS:

1) SCRAPER 1) GRADER

THIS REPORT PRESENTS OPINIONS FORMED AS A RESULT OF OUR OBSERVATION OF FILL PLACEMENT, AS WELL AS THE TESTS SHOWN ABOVE. WE HAVE RELIED UPON THE CONTRACTOR TO APPLY THE NECESSARY COMPACTION EFFORT AND MOISTURE TO ACHIEVE SPECIFIED COMPACTION DURING TIMES WHEN OUR OBSERVER IS NOT PRESENT, AND AT LOCATIONS OTHER THAN THOSE TESTED. TEST DATA ARE NOT THE SOLE BASIS FOR OPINIONS ON WHETHER THE FILL MEETS SPECIFICATIONS.

PROGRESS REPORT AS REQUESTED OUR FIELD ENGINEER PERFORMED COMPACTION TESTS ON FILL PLACEMENT IN THE EAST PORTION OF THE BUILDING EXCAVATION. OUR FIELD ENGINEER WAS INFORMED NO FURTHER TESTING WAS NEEDED AT THIS TIME.

☒ IN OUR OPINION, FILL COMPACTION MEETS SPECIFICATIONS AS INDICATED BY OUR OBSERVATIONS AND TEST NO.(S) 74-76

☐ IN OUR OPINION, FILL COMPACTION DOES NOT MEET SPECIFICATIONS AS INDICATED BY OUR OBSERVATIONS AND TEST NO.(S)

AND SHOULD BE REWORKED

SCOPE OF OBSERVATION: ☐ FULL TIME; ☒ PERIODIC, ON CALL BASIS; ☒ CONTRACTOR'S OR CLIENT'S REPRESENTATIVE ADVISED MIKE KRAUSE

CTL/THOMPSON, INC.

JIM CARETTO

FIELD REPRESENTATIVE

APPROVED BY RONALD M. MC OMBER P.E.

JK:RS



CTL/THOMPSON, INC.
CONSULTING GEOTECHNICAL AND MATERIALS ENGINEERS

July 24, 1985

Pepsi Cola Bottling Company of Denver
3801 Brighton Boulevard
Denver, Colorado 80216

Attention: Mr. Don Patton

Subject: Laboratory Test Results
Proposed Import Fill
Pepsi Plant Area
3801 Brighton Blvd.
Denver, Colorado
Job No. 11870

Gentlemen:

This letter transmits the results of laboratory tests we performed on a sample of soil submitted to our laboratory on July 11, 1985. The sample submitted was obtained from a stock pile at Potomac and Bayou Streets in Aurora. The sample was tested in accordance with applicable American Society for Testing Materials (ASTM) standards. Test results for percent passing the No. 200 sieve and Atterberg limits have been determined.

	<u>Passing No. 200 Sieve</u>	<u>Liquid Limit</u>	<u>Plasticity Index</u>
Northwest corner: Clay, Sl. Sandy, Brown	91	40	23
Center: Clay, Sl. Sandy, Brown	82	50	31

The laboratory test results and our experience indicate the soils are not satisfactory for use as structural fill in areas adjacent to the Pepsi Plant. The sample contains more clay and silt sized particles than recommended for this project. The clay portion of the soil is too plastic with a plasticity index of 23 to 31 and is expansive when wetted and, therefore, not suitable for use as structural fill under slabs.

Should you have any questions regarding the test results, please call.

Very truly yours,

CTL/THOMPSON, INC.

By _____
Ronald M. McOmber, P.E.
Manager of Construction Services

RMM:cf

(3 copies sent)

lcc Reid Burton Construction Company lcc Structural Consultants



Date 3-11-85

PEPSI COLA PLANT-BOX CULVERT

3801 BRIGHTON BLVD

3801 BRIGHTON BLVD

DENVER, COLORADO

DENVER, COLORADO 80216

ATTN: MR. DON PATTON

Daily Report No. 1[illegible]

pe of compaction equipment and number of units: _____

Number of passes:

Thickness of lift inches.

Method of adding moisture: _____

pe of earth moving equipment and number of units: (1) BACKHOE (1) LOADER

Progress Report:

E SITE WAS INSPECTED AS REQUESTED BY RON CARPENTER WITH REID BURTON CONSTRUCTION COMPANY. THE EASTERN 200 TO 300 FEET OF THE SITE HAS BEEN EXCAVATED TO NATURAL CLEAN SAND AND GRAVEL. PLACEMENT OF AN IMPORTED MINUS 6 INCH ROCK FILL WILL START IN THIS AREA TOMORROW (3-12-85).

DAN DOWNING & MARK ROENFELDT

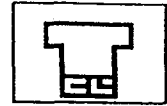
Field Engineer

:MR:CF

Approved by: _____

RONALD M. MC OMBER, P.E.

J. THOMPSON, INC.
CONSULTING GEOTECHNICAL
MATERIALS ENGINEERS



Job No. 11381

Date 3-13-85

Subject: Fill Control at
PEPSI COLA BOX CULVERT

3801 BRIGHTON BLVD

DENVER, COLORADO

Daily Report No. 2

PEPSI COLA BOTTLING CO. OF DENVER

3801 BRIGHTON BLVD

DENVER, COLORADO 80216

ATTN: MR. DON PATTON

T	LOCATION	DEPTH	TEST TYPE	SPEC. MAX. DENSITY P.C.F.	O.M.C. %	DRY DENSITY P.C.F.	MOISTURE CONTENT %	COMPACTION	SOIL TYPE

Type of compaction equipment and number of units: _____

Number of passes: _____

Thickness of lift _____ inches.

Method of adding moisture: _____

Type of earth moving equipment and number of units: (1) LOADER (2) TRUCKS

Press Report:

THE TIME OF INSPECTION THE CONTRACTOR WAS PLACING MINUS 6 INCH ROCK IN THE AREA
AVATED YESTERDAY. THIS AREA IS FROM THE EXISTING CULVERT TO APPROXIMATELY
FEET WEST. THE DEPTH OF THIS FILL VARIES FROM 1 TO 4 FEET IN THICKNESS.
S FILL AREA WAS PROOF ROLLED WITH A LOADED TRACTOR TRAILER RIG AND NO
FORMATION OF THE FILL WAS OBSERVED.

DAN DOWNING

Field Engineer

Approved by: _____
RONALD M. MC OMBER, P.E.

THOMPSON, INC.
CONSULTING GEOTECHNICAL
MATERIALS ENGINEERS



Job No. 11381

Date 3-14-85

Subject: Fill Control at

PEPSI COLA BOTTLING CO. OF DENVER

PEPSI COLA - BOX CULVERT

3801 BRIGHTON BOULEVARD

3801 BRIGHTON BOULEVARD

DENVER, COLORADO 80216

DENVER, COLORADO

ATTN: MR. DON PATTON

Daily Report No. 3

LOCATION ACCESS RAMP	ELEVATION	TEST TYPE	SPEC. MAX. DENSITY P.C.F.	O.M.C. %	DRY DENSITY P.C.F.	MOISTURE CONTENT %	COMPACTION	SOIL TYPE
18' W OF EXISTING HEAD WALL & 24' N OF C.L. OF BOX CULVERT.	5159.5	NUC	127.5	8.5	125	11.1	98	CURVE #1
24' W OF EXISTING HEAD WALL & 24' N OF C.L. OF BOX CULVERT.	5158.5	NUC	127.5	8.5	122	11.2	96	" "

Equipment and number of units: WHEEL ROLLING WITH A LOADER

Number of passes: --

Thickness of lift: -- inches.

Method of adding moisture: ==

Equipment and number of units: (1) BACKHOE (1) LOADER

Progress Report:

AT THE TIME OF OUR INSPECTION (10:00 A.M.) THE CONTRACTOR WAS CONTINUING PLACEMENT OF MINUS 6-INCH ROCK. WE WERE INFORMED BY RON CARPENTER FILL PLACEMENT FOR THE ACCESS RAMP WILL START LATER TODAY. THE SITE WAS REINSPECTED AS REQUESTED AT 4:00 P.M. AND FILL PLACEMENT HAD STARTED ON THE ACCESS RAMP. THE FILL MATERIAL IS AN IMPORTED, SANDY CLAY. THE ABOVE TESTS WERE PERFORMED IN THIS FILL AND THE CONTRACTOR WAS INFORMED OF THE TEST RESULTS.

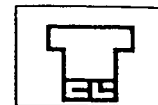
DAN DOWNING
Field Engineer

Approved by: _____

D:PV

RONALD M. MC OMBER, P.E.

THOMPSON, INC.
SULTING GEOTECHNICAL
MATERIALS ENGINEERS



Job No. 11381

Date 3-15-85

Subject: Fill Control at

PEPSI COLA BOTTLING CO. OF DENVER

PEPSI COLA - BOX CULVERT

3801 BRIGHTON BOULEVARD

3801 BRIGHTON BOULEVARD

DENVER, COLORADO 80216

DENVER, COLORADO

ATTN: MR. DON PATTON

Daily Report No. 4

LOCATION ACCESS ROAD	ELEVATION	TEST TYPE	SPEC. MAX. DENSITY P.C.F.	O.M.C. %	DRY DENSITY P.C.F.	MOISTURE CONTENT %	COMPACTION %	SOIL TYPE
18'W OF EXISTING HEAD WALL & 25'N OF C.L. BOX CULVERT	5162.5	NUC	127.5	8.5	116	8.9	91	CURVE #1
45'W OF EXISTING HEAD WALL & 25'N OF C.L. OF BOX CULVERT	5164.5	NUC	127.5	8.5	122	9.8	96	" "

Equipment of compaction equipment and number of units: WHEEL ROLLING WITH LOADER

Number of passes: --

Thickness of lift -- inches.

Method of adding moisture: --

Equipment of earth moving equipment and number of units: --

Dress Report:

THE ABOVE TESTS WERE PERFORMED ON ADDITIONAL FILL PLACED IN THE ACCESS RAMP AREA.
TEST #3 INDICATES UNSATISFACTORY COMPACTION. TEST #4 INDICATES SATISFACTORY COMPACTION.
THE CONTRACTOR WAS ADVISED TO RECOMPACT THE RAMP AREA. A RETEST WILL BE PERFORMED.

DAN DOWNING

Field Engineer

Approved by: _____

SPV

RONALD M. MC OMBER, P.E.

L/THOMPSON, INC.
CONSULTING GEOTECHNICAL
AND MATERIALS ENGINEERS



Job No. 11381

Date 3-18-85

Subject: Fill Control at

PEPSI-COLA, BOX CULVERT

3801 BRIGHTON BOULEVARD.

DENVER, COLORADO

Daily Report No. 5

to: PEPSI-COLA BOTTLING CO. OF DENVER
3801 BRIGHTON BOULEVARD
DENVER, COLORADO 80216
ATTN: MR. DON PATTON

TEST NO.	W. OF EXISTING HEAD- WALL LOCATION FROM C.L. OF BOX CULVERT	ELEVATION	TEST TYPE	SPEC. MAX. DENSITY P.C.F.	O.M.C. %	DRY DENSITY P.C.F.	MOISTURE CONTENT %	COMPACTION %	SOIL TYPE
	RETEST OF #3		NUC	127.5	8.5	122	8.3	95	CURVE #1
	20'W & 30'N	5168.5	NUC	127.5	8.5	121	8.9	95	" "
	50'W & 30'N	5167.0	NUC	127.5	8.5	125	7.9	98	" "
	6'W & 35'N	5172.5	NUC	127.5	8.5	126	5.8	98	" "
	45'W & 30'N	5170.5	NUC	127.5	8.5	117	8.3	91	" "

Type of compaction equipment and number of units: WHEEL ROLLING WITH FRONT END LOADER

Number of passes: VARIED

Thickness of lift 12 inches.

Method of adding moisture: NONE

Type of earth moving equipment and number of units: (1) BACKHOE (1) DOZER (1) LOADER

Progress Report:

THE ABOVE TESTS WERE PERFORMED DURING FILL PLACEMENT OF THE ACCESS RAMP. TEST RESULTS INDICATE SATISFACTORY COMPACTION EXCEPT FOR TEST #9. THE CONTRACTOR WAS INFORMED OF THE TEST RESULTS AND WAS ADVISED TO RECOMPACT IN THE AREA OF TEST #9. A RETEST WILL BE PERFORMED.

DAN DOWNING

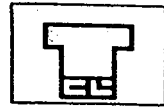
Field Engineer

Approved by: _____

RPV

RONALD M. MC OMBER, P.E.

./THOMPSON, INC.
CONSULTING GEOTECHNICAL
MATERIALS ENGINEERS



Job No. 11381

Date 3-28-85

Subject: Fill Control at

PEPSI-COLA BOTTLING CO. OF DENVER

PEPSI-COLA BOX CULVERT

3801 BRIGHTON BLVD

3801 BRIGHTON BLVD

DENVER, COLORADO 80216

DENVER, COLORADO

ATTN: MR. DON PATTON

Daily Report No. 6

LOCATION	DEPTH	TEST TYPE	SPEC. MAX. DENSITY P.C.F.	O.M.C. %	DRY DENSITY P.C.F.	MOISTURE CONTENT %	COMPACTION %	SOIL TYPE
ON SITE STOCKPILE		NUC	127.5	8.5	122	8.1	96	CURVE #1
ON SITE STOCKPILE		NUC	127.5	8.5	126	5.2	99	" "
ON SITE STOCKPILE		NUC	127.5	8.5	123	5.5	97	" "
ON SITE STOCKPILE		NUC	127.5	8.5	122	4.5	96	" "

Type of compaction equipment and number of units: _____

Number of passes: _____

Thickness of lift _____ inches.

Method of adding moisture: _____

Type of earth moving equipment and number of units: (1) DUMP TRUCKS (1) LOADER

Dress Report: _____

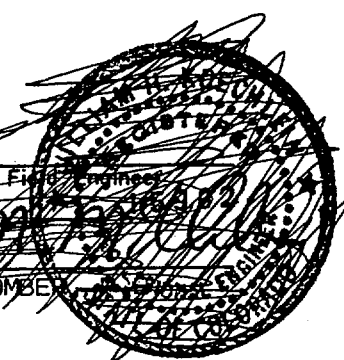
SITE WAS VISITED AS REQUESTED BY RON CARPENTER WITH REID BURTON CONSTRUCTION COMPANY. MOST OF THE EXISTING CONCRETE SLABS ALONG THE SOUTH BANK HAVE BEEN BROKEN INTO APPROXIMATELY 12 INCH PIECES AND STOCKPILED FOR LATER USE. THIS BROKEN CONCRETE HAS ALSO BEEN PLACED AGAINST THE BOTTOM OF THE SOUTH BANK TO BE USED AS CURB RAP. THE ABOVE TESTS WERE PERFORMED AS REQUESTED TO DETERMINE THE IN PLACE DENSITY OF THE IMPORTED FILL WHICH HAS BEEN STOCKPILED.

CF

DAN DOWNING

Approved by

RONALD M. MC DONALD



/THOMPSON, INC.
SULTING GEOTECHNICAL
MATERIALS ENGINEERS



Job No. 11381

Date 4-29-85

Subject: Fill Control at

PEPSI-COLA, BOX CULVERT

3801 BRIGHTON BLVD

DENVER, COLORADO

Daily Report No. 7

PEPSI COLA BOTTLING COMPANY OF DENVER

3801 BRIGHTON BLVD

DENVER, COLORADO 80216

ATTN: MR. DON PATTON

LOCATION	DEPTH	TEST TYPE	SPEC. MAX. DENSITY P.C.F.	O.M.C. %	DRY DENSITY P.C.F.	MOISTURE CONTENT %	COMPACTION %	SOIL TYPE
ON SITE STOCKPILE		NUC	127.5	8.5	123	9.0	96	CURVE #1
ON SITE STOCKPILE		NUC	127.5	8.5	116	13.4	91	" "
ON SITE STOCKPILE		NUC	127.5	8.5	117	12.4	92	" "
ON SITE STOCKPILE		NUC	127.5	8.5	119	10.6	93	" "

of compaction equipment and number of units: _____

ber of passes: _____

ickness of lift _____ inches.

hod of adding moisture: _____

of earth moving equipment and number of units: _____

ress Report:

ABOVE TESTS WERE PERFORMED AS REQUESTED BY RON CARPENTER WITH REID BURTON CONSTRUCTION. CARPENTER WAS INFORMED OF THE TEST RESULTS.

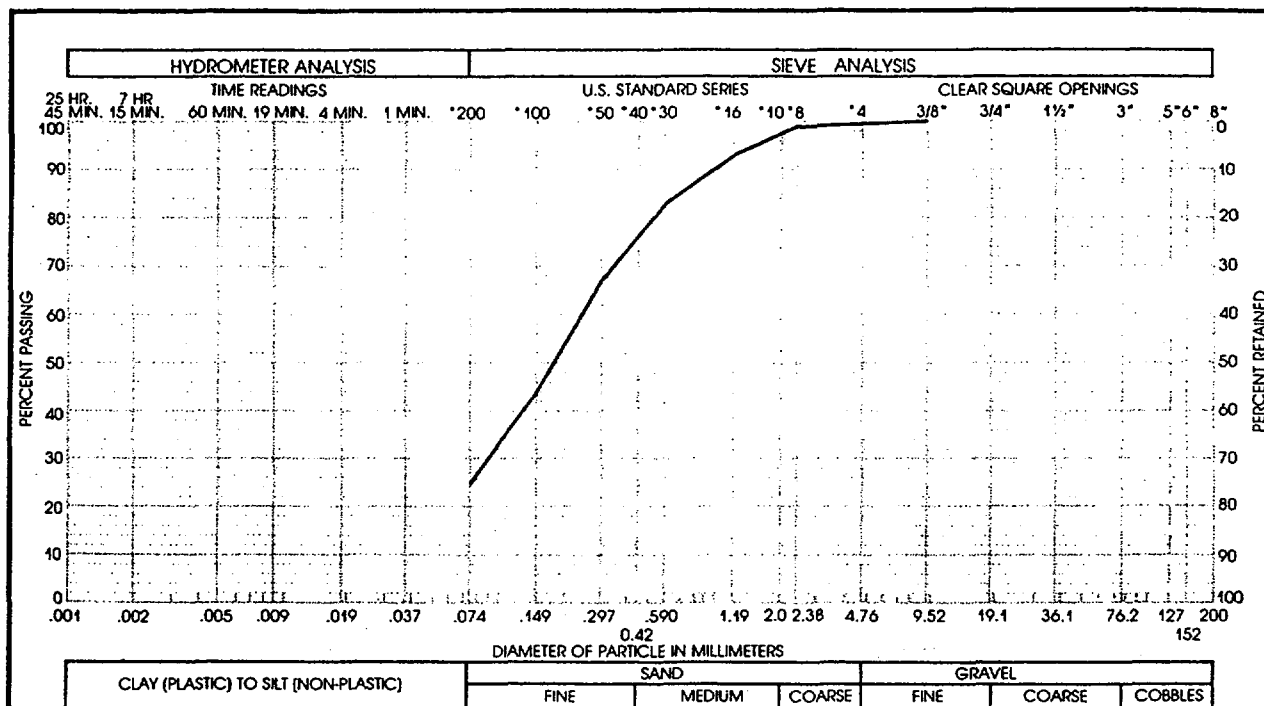
DAN DOWNING

Field Engineer

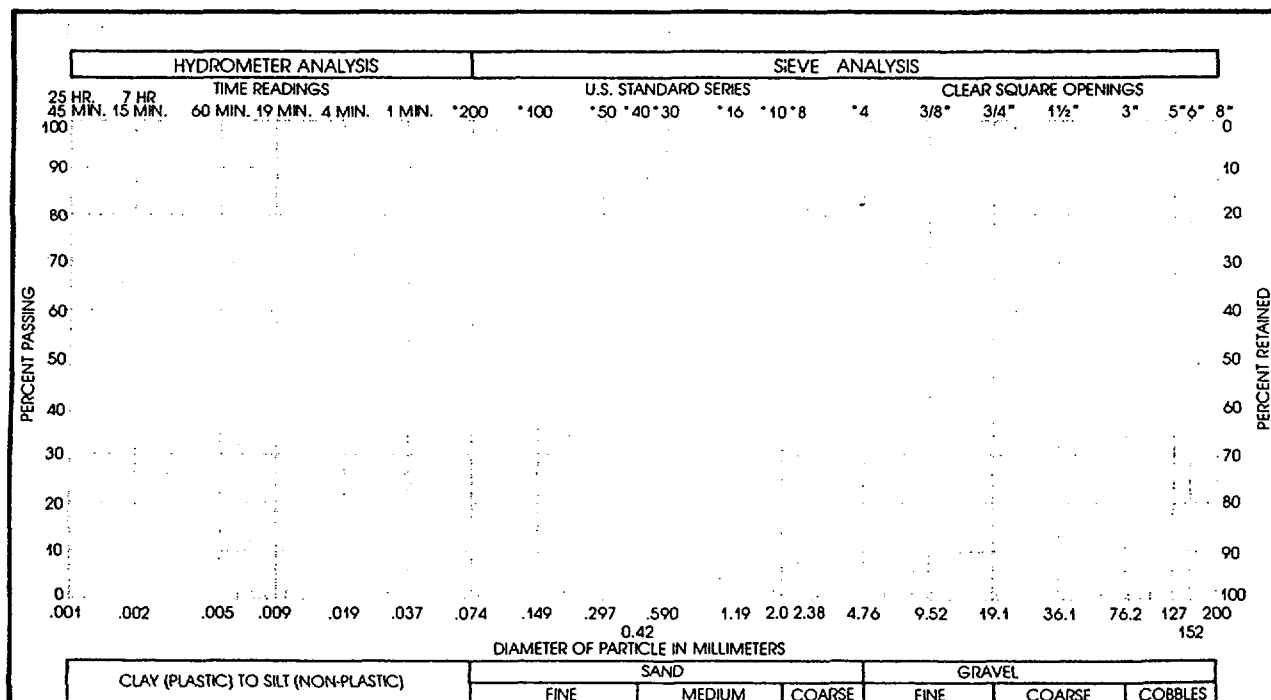
CF

Approved by: _____

RONALD M. MC OMBER, P.E.

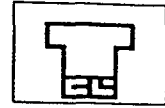


Sample of PROPOSED IMPORT FILL GRAVEL 0 % SAND 76 %
From PEPSI-COLA CURVE NO. 2 SILT & CLAY 24 % LIQUID LIMIT N.L. %
PLASTICITY INDEX N.P. %



Sample of _____ GRAVEL _____ % SAND _____ %
From _____ SILT & CLAY _____ % LIQUID LIMIT _____ %
PLASTICITY INDEX _____ %

L/THOMPSON, INC.
CONSULTING GEOTECHNICAL
AND MATERIALS ENGINEERS



Job No. 11381

Date 5-24-85

Subject: Fill Control at

PEPSI-COLA, BOX CULVERT

3801 BRIGHTON BLVD

ROCK FILL PLACEMENT

To: PEPSI COLA BOTTLING COMPANY OF DENVER

3801 BRIGHTON BLVD

DENVER, COLORADO 80216

ATTN: MR. DON PATTON

Daily Report No. 8

ST O.	LOCATION	DEPTH	TEST TYPE	SPEC. MAX. DENSITY P.C.F.	O.M.C. %	DRY DENSITY P.C.F.	MOISTURE CONTENT %	COMPACTION	SOIL TYPE

Type of compaction equipment and number of units:

Number of passes:

Thickness of lift inches.

Method of adding moisture:

Type of earth moving equipment and number of units:

Progress Report:

REQUESTED, WE MET WITH RON CARPENTER OF REID BURTON CONSTRUCTION TO DISCUSS
PLACEMENT OF WASTE CONCRETE AND MINUS 6 INCH ROCK IN THE BOX CULVERT AREA. RON
DID PREVIOUSLY BROKEN THE WASTE CONCRETE INTO PIECES LESS THAN 12 INCHES AND PLACED
THEM IN AN AREA FROM THE EXISTING CULVERT TO 185 FEET WEST OF THE CULVERT. WE RE-
COMMENDED THE INITIAL LIFT OF WASTE CONCRETE BE 12 TO 18 INCHES IN DEPTH WITH A
1 INCH LIFT OF MINUS 6 INCH ROCK PLACED ON TOP BEFORE COMPACTING. RON INDICATED
HE WILL USE THE SAME PROCEDURE FOR THE LIFTS ABOVE THE INITIAL ONE UNTIL THE WASTE
CONCRETE IS EXHAUSTED AND THEN WILL USE THE MINUS 6 INCH ROCK UNTIL COMPLETED.
THE LARGER PIECES (GREATER THAN 12 INCHES) OF WASTE CONCRETE WERE OBSERVED IN THE
ENTIRE AREA AND RON SAID THEY WOULD BE BROKEN DOWN FURTHER OR REMOVED.

PAUL HUNSADER

Field Engineer

:CF

Approved by:

RONALD M. MC OMBER, P.E.



THOMPSON, INC.
CONSULTING GEOTECHNICAL
MATERIALS ENGINEERS



Job No. 11381

Date 5-29-85

Subject: Fill Control at

PEPSI COLA BOTTLING CO. OF DENVER

PEPSI COLA PLANT

3801 BRIGHTON BOULEVARD

3801 BRIGHTON BLVD.

DENVER, COLORADO 80216

ROCKFILL PLACEMENT

ATTN: MR. DON PATTON

Daily Report No. 10

LOCATION	DEPTH	TEST TYPE	SPEC. MAX. DENSITY P.C.F.	O.M.C. %	DRY DENSITY P.C.F.	MOISTURE CONTENT %	COMPACTION	SOIL TYPE

of compaction equipment and number of units: (1) VIBRATING SHEEPSFOOT

ber of passes: VARIED

kness of lift — inches.

iod of adding moisture: —

of earth moving equipment and number of units: (1) FRONT LOADER

ress Report:

NG THESE TWO SITE VISITS THE CONTRACTOR CONTINUED PLACEMENT OF MINUS 6 INCH CRUSHED ROCK
HE SURFACE OF THE WASTE CONCRETE FILL. THE CONTRACTOR WAS IN THE PROCESS OF COMPACTING
; FILL. THE SURFACE APPEARED FIRM WITH A SMALL AMOUNT OF PUMPING AT STATION 8+80.

DELMAR FISCHER

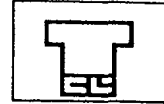
Field Engineer

Approved by: _____

RONALD M. MC OMBER, P.E.

IV

/THOMPSON, INC.
SULTING GEOTECHNICAL
MATERIALS ENGINEERS



Job No. 11381

Date 5-30-85

Subject: Fill Control at

PEPSI COLA BOTTLING CO. OF DENVER

PEPSI COLA PLANT

3801 BRIGHTON BOULEVARD

3801 BRIGHTON BLVD.

DENVER, COLORADO 80216

ROCK FILL PLACEMENT

ATTN: MR. DON PATTON

Daily Report No. 11

LOCATION	DEPTH	TEST TYPE	SPEC. MAX. DENSITY P.C.F.	O.M.C. %	DRY DENSITY P.C.F.	MOISTURE CONTENT %	COMPACTION	SOIL TYPE

of compaction equipment and number of units: (1) VIBRATORY SHEEPSFOOT ROLLER

ber of passes: VARIED

kness of lift 18-24 inches.

od of adding moisture: —

of earth moving equipment and number of units: (1) FRONT LOADER

ress Report:

ING THIS SITE VISIT THE CONTRACTOR CONTINUED THE PLACEMENT OF MINUS 6 INCH CRUSHED
(FROM STATION 11+40 TO 7+80. SURFACE PUMPING WAS DETECTED AT STATION 8+80. THE
TRACTOR REMOVED THESE MATERIALS IN THIS AREA, AND BACKFILLED WITH MINUS 6 INCH
SHED ROCK. A SLIGHT AMOUNT OF PUMPING WAS STILL VISIBLE.

DELMAR FISCHER

Field Engineer

Approved by: _____

RONALD M. MC OMBER, P.E.

THOMPSON, INC.
CONSULTING GEOTECHNICAL
MATERIALS ENGINEERS



Job No. 11381

Date 5-31-85

Subject: Fill Control at

PEPSI-COLA, BOX CULVERT

3801 BRIGHTON BLVD.

ROCK FILL PLACEMENT

Daily Report No. 12

PEPSI COLA BOTTLING CO. OF DENVER.

3801 BRIGHTON BOULEVARD

DENVER, COLORADO 80216

ATTN: MR. DON PATTON

LOCATION	DEPTH	TEST TYPE	SPEC. MAX. DENSITY P.C.F.	O.M.C. %	DRY DENSITY P.C.F.	MOISTURE CONTENT %	COMPACTION	SOIL TYPE

of compaction equipment and number of units: (1) VIBRATORY SHEEPSFOOT COMPACTOR

er of passes: ---

ness of lift --- inches.

od of adding moisture: ---

of earth moving equipment and number of units: (1) FRONT END LOADER

ess Report:

SITE WAS VISITED TO OBSERVE THE PROGRESS OF ROCK FILL PLACEMENT IN THE BOX CULVERT . THE CONTRACTOR WAS PREPARING TO POUR A 4 INCH MAT OF CONCRETE FROM THE EXISTING ERT WEST OVER THE ROCK FILL TO TRY AND PREVENT THE ROCK FILL FROM BEING WASHED AND ALSO FOR A BETTER WORKING SURFACE FOR INSTALLATION OF THE BOX CULVERT. A . AMOUNT OF ROCK FILL WAS BEING PLACED APPROXIMATELY 250 FEET TO THE WEST OF THE TING CULVERT TO BRING THE AREA TO THE DESIGN ELEVATION. A DEFORMING AREA WAS OB- ED AT STATION 8+10 TO STATION 8+20 ALONG THE SOUTHERN HALF (6 FEET) OF THE FILL . APPROXIMATELY 5 FEET OF ROCK AND WASTE CONCRETE HAS BEEN PLACED IN THIS AREA. DECIDED TO TRY AND STABILIZE THIS AREA WITH MORE ROCK AND, IF THIS DOESN'T WORK, REMOVE AND REPLACE THE AREA AT A LATER TIME.

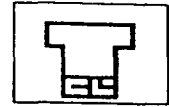
PAUL HUNSADER

Field Engineer

Approved by: _____

RONALD M. MC OMBER, P.E.

THOMPSON, INC.
SULTING GEOTECHNICAL
MATERIALS ENGINEERS



Job No. 11381

Date 6-3-85

Subject: Fill Control at

PEPSI COLA BOTTLING CO. OF DENVER

PEPSI COLA PLANT

3801 BRIGHTON BOULEVARD

3801 BRIGHTON BLVD.

DENVER, COLORADO 80216

ROCK FILL PLACEMENT

ATTN: MR. DON PATTON

Daily Report No. 13

LOCATION	DEPTH	TEST TYPE	SPEC. MAX. DENSITY P.C.F.	O.M.C. %	DRY DENSITY P.C.F.	MOISTURE CONTENT %	COMPACTION	SOIL TYPE

of compaction equipment and number of units: ---

ber of passes: ---

kness of lift --- inches.

iod of adding moisture: ---

of earth moving equipment and number of units: ---

ress Report:

R TO THIS SITE VISIT, THE CONTRACTOR COMPLETED FILL PLACEMENT BENEATH THE PROPOSED CULVERT FROM APPROXIMATELY STATION 7+50 TO 11+40. NO WORK WAS IN PROGRESS AT THIS . THE CONTRACTOR REQUESTED A SITE VISIT ON TUESDAY 6-4-85 TO PERFORM NUCLEAR ITY TESTS ON IMPORT FILL MATERIAL.

DELMAR FISCHER

Field Engineer

Approved by: _____

RONALD M. MC OMBER, P.E.

V

/THOMPSON, INC.
SULTING GEOTECHNICAL
MATERIALS ENGINEERS



Job No. 11381

Date 6-5-85

Subject: Fill Control at

PEPSI COLA BOTTLING CO. OF DENVER

PEPSI-COLA BOX CULVERT

3801 BRIGHTON BOULEVARD

3801 BRIGHTON BLVD.

DENVER, COLORADO 80216

BULK DENSITY

ATTN: MR. DON PATTON

Daily Report No. 14

IN THE TRUCK BOX LOCATION ***	DEPTH *	TEST TYPE	WET DENSITY P.C.F.	O.M.C. %	DRY DENSITY P.C.F.	MOISTURE CONTENT % **	COMPACTION	SOIL TYPE
12" DT FRONT	0.5	NUC	91	---	78	15.6	---	CLAY V. SANDY RED BROWN
6" DT FRONT	0.5	NUC	93	---	80	15.6	---	" "
12" DT REAR	1.0	NUC	100	---	89	12.1	---	" "
6" DT REAR	1.0	NUC	67	---	60	12.1	---	" "
12" DT CENTER	0.5	NUC	95	---	84	13.0	---	" "
6" DT CENTER	0.5	NUC	63	---	56	13.0	---	" "

of compaction equipment and number of units: --

ber of passes: --

kness of lift -- inches.

od of adding moisture: --

of earth moving equipment and number of units: --

ress Report:

REQUESTED BY RON CARPENTER OF REID BURTON CONSTRUCTION, THE ABOVE TESTS WERE
FORMED ON THE IMPORT FILL MATERAIL IN A LOADED TRUCK. THIS WAS DONE TO DETERMINE
BULK DENSITY OF THE MATERIAL.

ELOW SURFACE OF FILL MATERIAL IN THE
LOADED TRUCK (FEET)

DELMAR FISCHER

Field Engineer

ERCENT MOISTURE DETERMINED BY OVEN DRIED
AMPLE

Approved by: _____

T= DIRECT TRANSMISSION

RONALD M. MC OMBER, P.E.

THOMPSON, INC.
SULTING GEOTECHNICAL
MATERIALS ENGINEERS



Job No. 11381

Date 6-7-85

Subject: Fill Control at

PEPSI COLA BOTTLING CO. OF DENVER

PEPSI COLA. BOX CULVERT

3801 BRIGHTON BOULEVARD

3801 BRIGHTON BLVD.

DENVER, COLORADO 80216

BULK DENSITY

ATTN: MR. DON PATTON

Daily Report No. 15

LOCATION ** IN THE TRUCK BOX	DEPTH *	TEST TYPE	WET DENSITY P.C.F.	O.M.C. %	DRY DENSITY P.C.F.	MOISTURE CONTENT %	COMPACTION	SOIL TYPE
12'' DT FRONT	0.5	NUC	95	--	82	16.4	--	CLAY V. SANDY
12'' DT REAR	1.0	NUC	98	--	82	19.6	--	" "

of compaction equipment and number of units: --

ber of passes: --

kness of lift -- inches.

od of adding moisture: --

of earth moving equipment and number of units: --

ress Report:

REQUESTED BY RON CARPENTER OF REID BURTON CONSTRUCTION, THE ABOVE TESTS WERE
PERFORMED ON THE IMPORT MATERIAL IN A LOADED TRUCK. THIS WAS DONE TO DETERMINE
BULK DENSITY OF THE MATERIAL.

DELMAR FISCHER

Field Engineer

BELOW THE SURFACE OF FILL MATERIAL IN THE LOADED TRUCK

T=DIRECT TRANSMISSION

Approved by:

PV

RONALD M. MC OMBER, P.E.

Daily Report No. 16

ATTN: MR. DON PATTON

THOMPSON, INC.
SULTING GEOTECHNICAL
MATERIALS ENGINEERS



Job No. 11381

Date 6-14-85

Subject: Fill Control at

PEPSI PLANT - BOX CULVERT

3801 BRIGHTON BLVD

STOCKPILE DENSITY

Daily Report No. 17

PEPSI COLA BOTTLING COMPANY OF DENVER

3801 BRIGHTON BLVD

DENVER, COLORADO 80216

ATTN: MR. DON PATTON

LOCATION N.E. STOCKPILE:	DEPTH *	TEST TYPE	SPEC. MAX. DENSITY P.C.F.	O.M.C. %	DRY DENSITY P.C.F.	MOISTURE CONTENT %	COMPACTION %	SOIL TYPE
N.W. CORNER	6.0	NUC	118	11.5	113	11.7	96	CURVE #4
S.W. CORNER	8.0	NUC	118	11.5	104	14.3	88	" "
S. SIDE, CENTER	12.0	NUC	118	11.5	112	11.0	95	" "
CENTER	13.0	NUC	118	11.5	116	10.6	98	" "
N. SIDE CENTER	12.0	NUC	118	11.5	108	13.9	92	" "
N.E. CORNER	10.0	NUC	118	11.5	112	10.2	95	" "
S.E. CORNER	10.0	NUC	118	11.5	113	11.4	96	" "

of compaction equipment and number of units: _____

ber of passes: _____

kness of lift _____ inches.

od of adding moisture: _____

of earth moving equipment and number of units: _____

ress Report:

REQUESTED BY RON CARPENTER WITH REID BURTON CONSTRUCTION, FIELD DENSITY TESTS
E PERFORMED ON MATERIAL IN THE NORTHEAST STOCKPILE. THIS MATERIAL WAS IMPORTED
M MOBILE PRE-MIX.

DELMAR FISCHER

Field Engineer

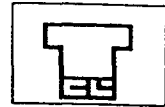
PPROXIMATE HEIGHT OF STOCKPILE AT THE
EST LOCATION (FEET)

Approved by: _____

RONALD M. MC OMBER, P.E.

CF

THOMPSON, INC.
SULTING GEOTECHNICAL
MATERIALS ENGINEERS



Job No. 11381

Date 6-21-85

Subject: Fill Control at

PEPSI COLA BOTTLING COMPANY OF DENVER

PEPSI PLANT - BOX CULVERT

3801 BRIGHTON BLVD

3801 BRIGHTON BLVD

DENVER, COLORADO 80216

STOCKPILE DENSITY

ATTN: MR. DON PATTON

Daily Report No. 18

LOCATION STOCKPILE:	DEPTH *	TEST TYPE	SPEC. MAX. DENSITY P.C.F.	O.M.C. %	DRY DENSITY P.C.F.	MOISTURE CONTENT %	COMPACTION %	SOIL TYPE
N. SIDE, CENTER	18.0	NUC	118	11.5	110	17.2	93	CURVE #4
S. SIDE, CENTER	20.0	NUC	118	11.5	104	18.3	88	" "
S.E. CORNER	17.0	NUC	118	11.5	115	15.1	97	" "
N.E. CORNER	14.0	NUC	118	11.5	110	14.0	93	" "
N.W. CORNER	12.0	NUC	118	11.5	115	13.3	97	" "
S.W. CORNER	12.0	NUC	118	11.5	110	16.8	93	" "

of compaction equipment and number of units: _____

ber of passes: _____

kness of lift _____ inches.

iod of adding moisture: _____

of earth moving equipment and number of units: _____

ress Report:

REQUESTED THE ABOVE TESTS WERE PERFORMED ON MATERIAL IN THE STOCKPILE LOCATED IN THE THEAST CORNER OF THE SITE.

PROXIMATE HEIGHT OF STOCKPILE
T TEST LOCATION (FEET)

DELMAR FISCHER

Field Engineer

Approved by: _____

RONALD M. MC OMBER, P.E.

CF

./THOMPSON, INC.
CONSULTING GEOTECHNICAL
MATERIALS ENGINEERS



Job No. 11381

Date 6-28-85

Subject: Fill Control at

PEPSI PLANT - BOX CULVERT

PEPSI COLA BOTTLING COMPANY OF DENVER

3801 BRIGHTON BLVD

3801 BRIGHTON BLVD

STOCKPILE DENSITY

DENVER, COLORADO 80216

Daily Report No. 19

ATTN: MR. DON PATTON

FROM INDICATED LOCATION LOCATION ON STOCKPILE	DEPTH *	TEST TYPE	SPEC. MAX. DENSITY P.C.F.	O.M.C. %	DRY DENSITY P.C.F.	MOISTURE CONTENT %	COMPACTION %	SOIL TYPE
N.E. CORNER	14.0	NUC	118	11.5	113	12.3	96	CURVE #4
NORTH SIDE	20.0	NUC	118	11.5	116	14.2	98	" "
N.W. CORNER	16.0	NUC	118	11.5	113	15.1	95	" "
S.W. CORNER	14.0	NUC	118	11.5	103	13.5	87	" "
SOUTH SIDE	20.0	NUC	118	11.5	111	13.6	94	" "
S.E. CORNER	14.0	NUC	118	11.5	109	13.7	92	" "

Method of compaction equipment and number of units: _____

Number of passes: _____

Thickness of lift _____ inches.

Method of adding moisture: _____

Method of earth moving equipment and number of units: _____

Dress Report:

REQUESTED, OUR FIELD ENGINEER VISITED THE SITE TO PERFORM FIELD DENSITY TESTS. THE TRACTOR CONTINUED TO PLACE MATERIAL ON THE STOCKPILE IN THE NORTHEAST CORNER OF THE E. THE CONTRACTOR WAS INFORMED OF THE TEST RESULTS.

PAT CLEVINGER

Field Engineer

APPROXIMATE HEIGHT OF STOCKPILE AT
TEST LOCATION (FEET)

Approved by: _____

RONALD M. MC COMBER, P.E.

CF

/THOMPSON, INC.
SULTING GEOTECHNICAL
MATERIALS ENGINEERS



Job No. 11381

Date 7-1-85

Subject: Fill Control at

PEPSI COLA PLANT

3801 BRIGHTON BLVD

SEPTIC TANK REMOVAL

Daily Report No. 20

PEPSI COLA BOTTLING COMPANY OF DENVER

3801 BRIGHTON BLVD

DENVER, COLORADO 80216

ATTN: MR. DON PATTON

LOCATION	DEPTH	TEST TYPE	SPEC. MAX. DENSITY P.C.F.	O.M.C. %	DRY DENSITY P.C.F.	MOISTURE CONTENT %	COMPACTION	SOIL TYPE

: of compaction equipment and number of units: _____

ber of passes: _____

kness of lift _____ inches.

od of adding moisture: _____

: of earth moving equipment and number of units: (1) FRONT-END LOADER

ress Report:

THE REQUEST OF RON CARPENTER OF REID BURTON CONSTRUCTION, THE SITE WAS VISITED TO ERVE REMOVAL OF TWO SEPTIC TANKS AND TO EVALUATE THE MOISTURE CONTENT OF THE SOIL HIN AN OLD LEACHING FIELD. THE AREA BEING EXCAVATED IS LOCATED 100 FEET NORTHWEST BRIGHTON BLVD. AND 100 FEET NORTHEAST OF PEPSI-COLA'S LOADING DOCKS. BOTH SEPTIC KS AND ALL ORGANIC MATERIAL WAS REMOVED. THE TOP 3 TO 4 FEET CONSISTED OF A STIFF ST BROWN SLIGHTLY SANDY CLAY. BELOW THE CLAY, NATURAL SOIL WAS ENCOUNTERED WHICH SISTED OF MOIST LIGHT BROWN, GRAVELLY SAND. RON CARPENTER INFORMED US THIS AREA LD BE REWORKED AND RECOMPACTED AT A LATER DATE. UNTIL THAT TIME THE TEST PIT WAS LED AND WHEEL ROLLED WITH A FRONT-END LOADER. RON CARPENTER WAS INFORMED COMPACTION TS SHOULD BE PERFORMED WHEN THE AREA IS REWORKED AND COMPACTED.

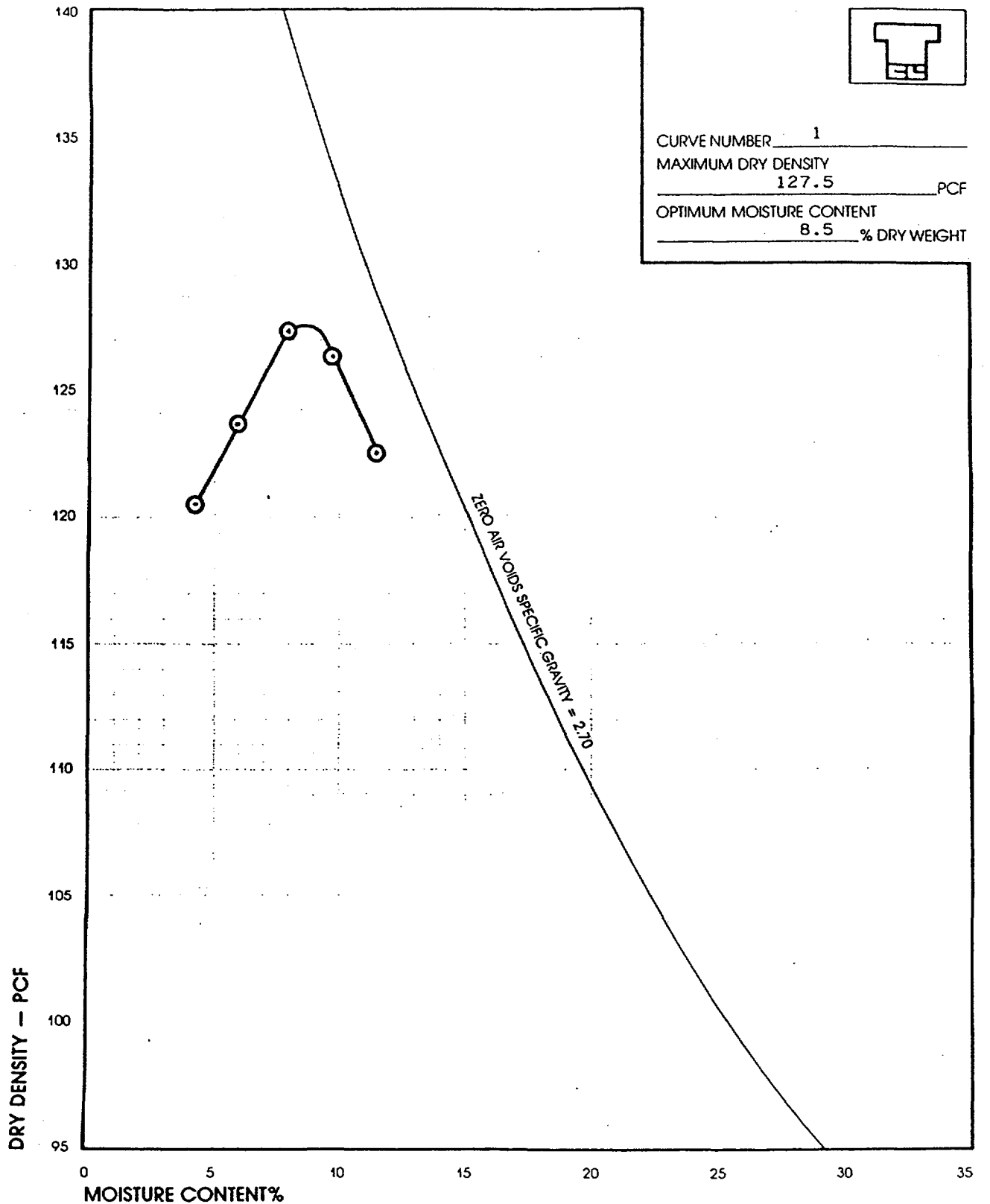
KIRK SKINNER

Field Engineer

Approved by: _____

RONALD M. MC OMBER, P.E.

CF

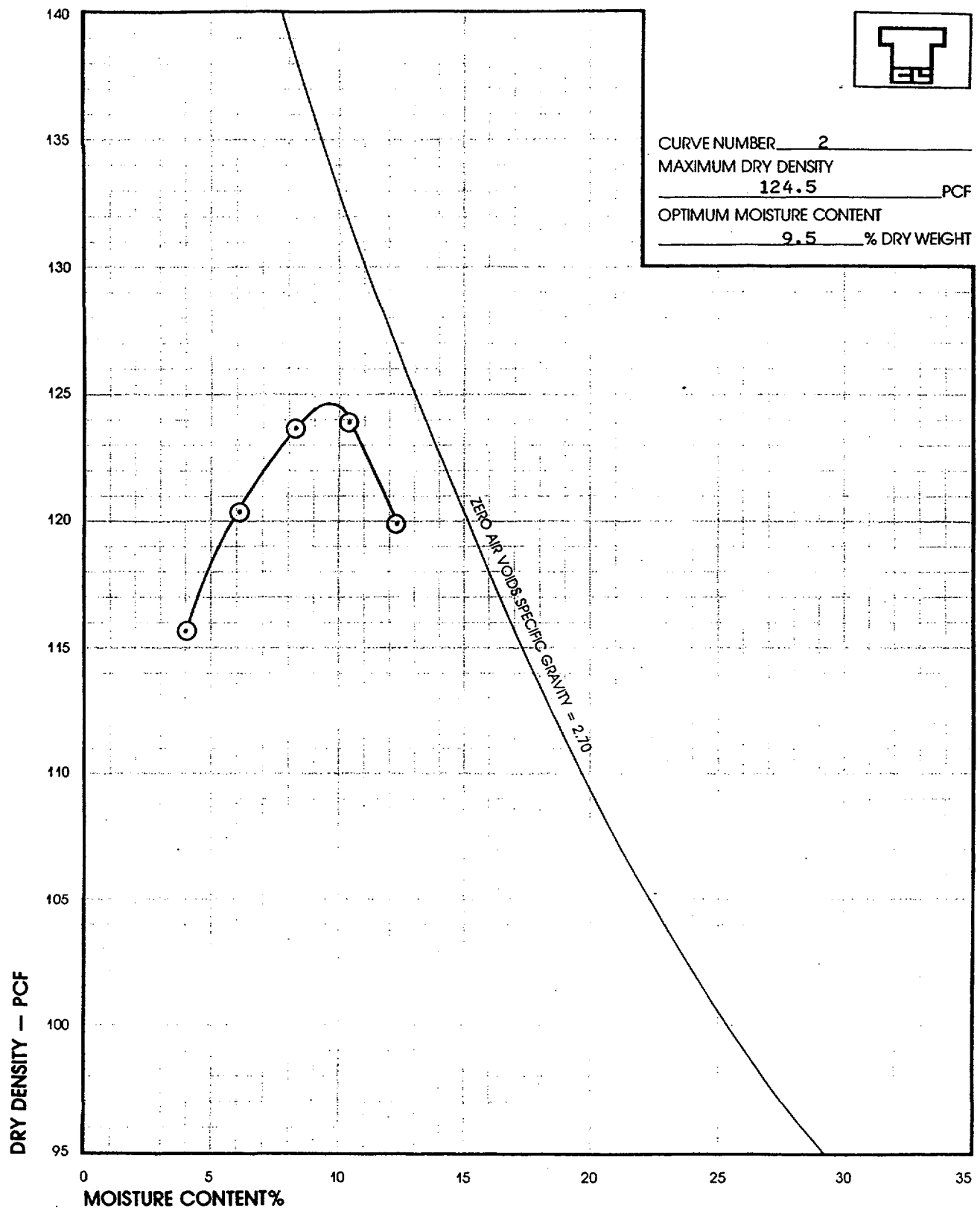


Sample Description SAND, CLAYEY, RED BROWN

Location IMPORT TO PEPSI PLANT
BOX CULVERT

Compaction Test Procedure ASTM D 698-78
METHOD 'A'

LIQUID LIMIT 22 %
 PLASTICITY INDEX 8 %
 GRAVEL 0 %
 SAND 73 %
 SILT AND CLAY 27 %



Sample Description PROPOSED IMPORT FILL

LIQUID LIMIT N.L. %

Location PEPSI-COLA

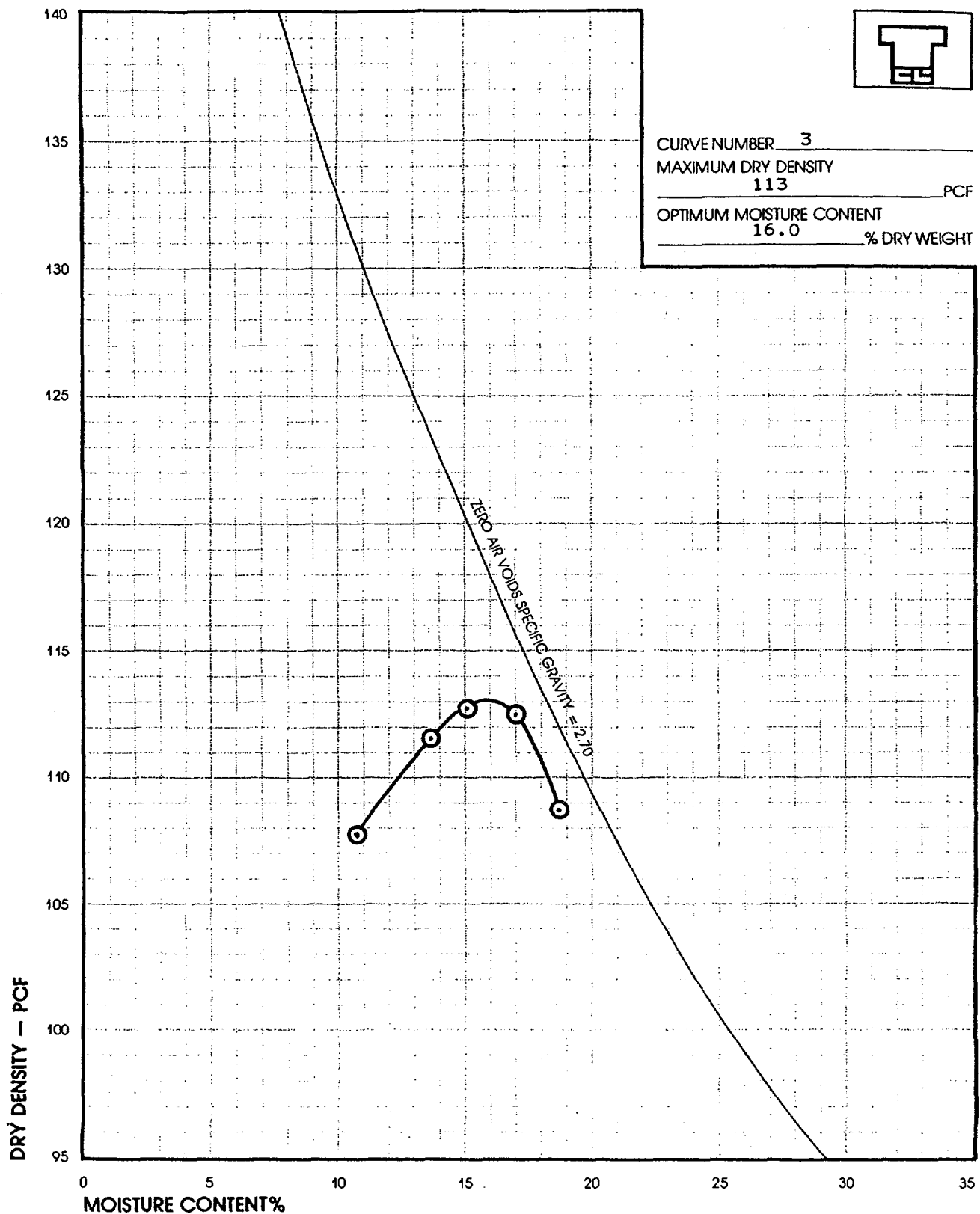
PLASTICITY INDEX N.P. %

Compaction Test Procedure ASTM D 1557-78

GRAVEL 0 %

SAND 76 %

SILT AND CLAY 24 %



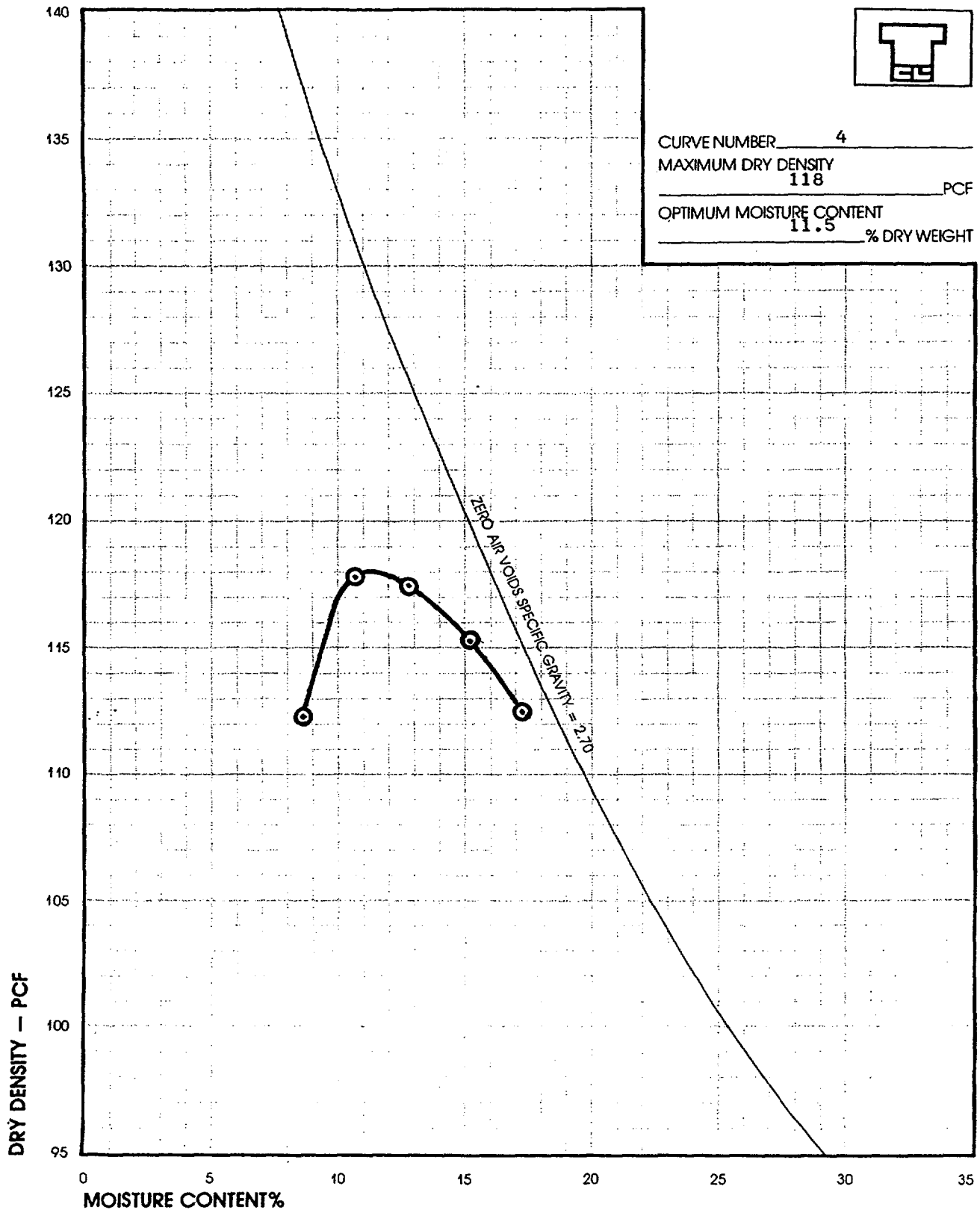
Sample Description CLAY, SANDY WITH GRAVELS
(LESS THAN 10%)

Location IMPORT FROM MOBIL PRE MIX

Compaction Test Procedure ASTM D 698-78
METHOD 'A'

LIQUID LIMIT _____ %
PLASTICITY INDEX _____ %
GRAVEL _____ %
SAND _____ %
SILT AND CLAY _____ %

Compaction Test Results



Sample Description CLAY, SANDY WITH GRAVELS
(LESS THAN 10%)

Location N.E. STOCKPILE FROM
MOBILE PREMIX

Compaction Test Procedure ASTM D 698-78
METHOD 'C'

LIQUID LIMIT _____ %
PLASTICITY INDEX _____ %
GRAVEL _____ %
SAND _____ %
SILT AND CLAY _____ %

JOB NO. 11381

**Compaction
Test Results**

L/THOMPSON, INC.
CONSULTING GEOTECHNICAL
AND MATERIALS ENGINEERS



Job No. 11381

Date 7-2-85

Subject: Fill Control at

PEPSI PLANT

3801 BRIGHTON BLVD

SEPTIC TANK REMOVAL & BACKFILL

Daily Report No. 21

TO: PEPSI COLA BOTTLING COMPANY OF DENVER

3801 BRIGHTON BLVD

DENVER, COLORADO 80216

ATTN: MR. DON PATTON

ST X	FROM N.W. CORNER LOCATION SERVICE WAREHOUSE:	DEPTH *	TEST TYPE	SPEC. MAX. DENSITY P.C.F.	O.M.C. %	DRY DENSITY P.C.F.	MOISTURE CONTENT %	COMPACTION %	SOIL TYPE
	20'E, 20'S	1.5	SAND	124.5	9.5	120	9.0	96	CURVE #1
	20'E, 70'S	3.0	SAND	124.5	9.5	119	8.5	95	" "
	20'E, 100'S	4.5	SAND	124.5	9.5	121	6.7	97	" "

Type of compaction equipment and number of units: (1) PNEUMATIC ROLLER

Number of passes: VARIED

Thickness of lift 8 inches.

Method of adding moisture: NATURAL

Type of earth moving equipment and number of units: (1) SCRAPER

Dress Report:

REQUESTED, OUR FIELD ENGINEER VISITED THE SITE TO PERFORM FIELD DENSITY TESTS. THE CONTRACTOR HAD COMPLETED REMOVING AND COMPACTING BACKFILL INTO A SEPTIC LINE RUNNING FROM NORTH TO SOUTH ALONG THE WESTERN EDGE OF THE SERVICE WAREHOUSE. THE ABOVE TEST RESULTS INDICATE SATISFACTORY COMPACTION. THE CONTRACTOR WAS INFORMED OF THE TEST RESULTS.

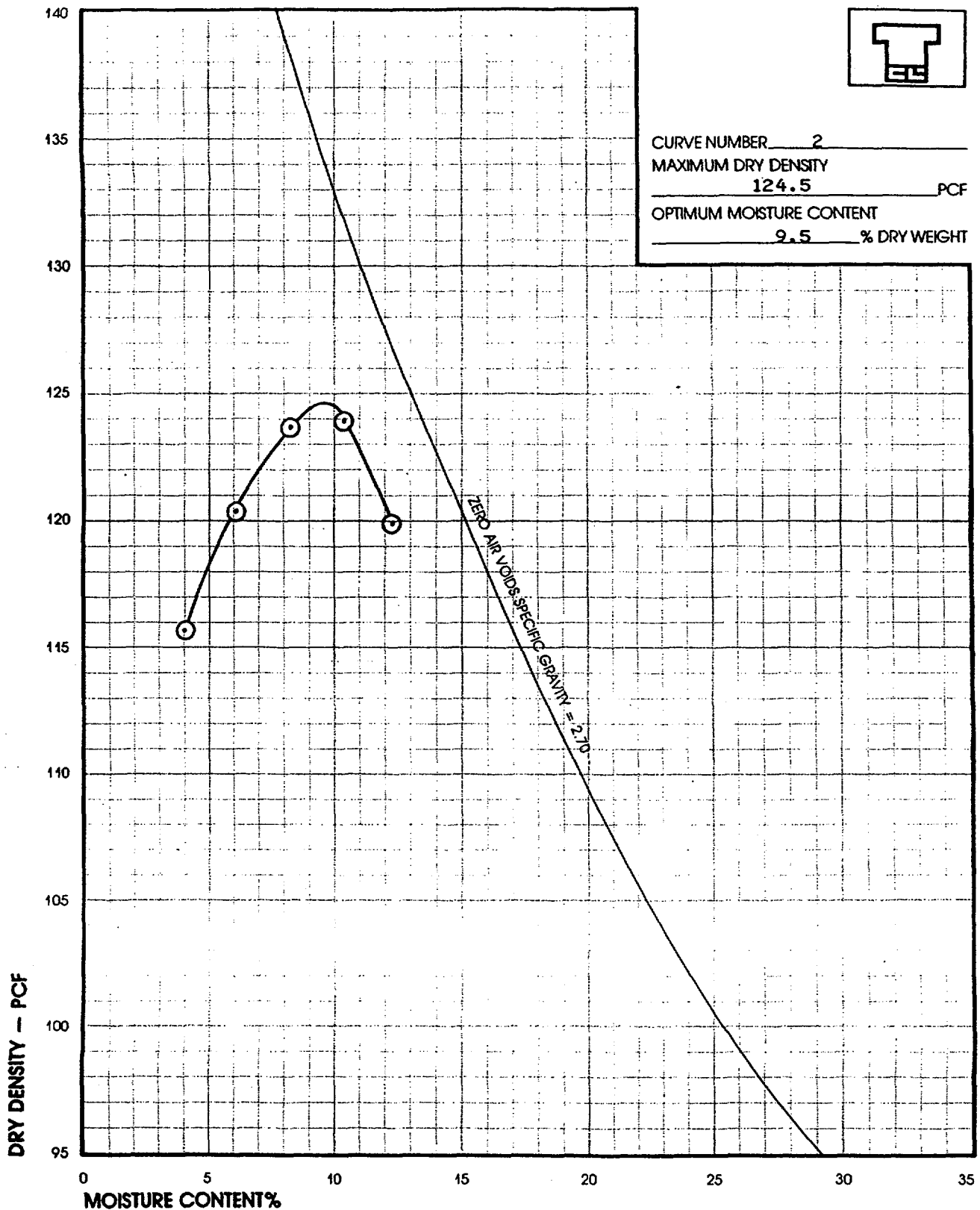
PAT CLEVINGER

Field Engineer

DEPTH BELOW FINISH GRADE (FEET)

Approved by: RONALD M. MC COMBER, P.E.

CF



Sample Description PROPOSED IMPORT FILL

Location PEPSI-COLA

Compaction Test Procedure ASTM D 1557-78

LIQUID LIMIT N.I. %

PLASTICITY INDEX N.P. %

GRAVEL 0 %

SAND 76 %

SILT AND CLAY 24 %

**Compaction
Test Results**



CTL/THOMPSON, INC.
CONSULTING GEOTECHNICAL AND MATERIALS ENGINEERS

October 22, 1985

Pepsi Cola Bottling Co. of Denver
3801 Brighton Boulevard
Denver, Colorado 80216

Attention: Mr. Don Patton

Subject: Statement of Substantial Conformance
Fill Operations
Pepsi Warehouse and Sports Facility Additions
and Box Culvert
Job Nos. 11,381 and 11,870

Gentlemen:

Our engineering technician was on site during the preparation of subgrade for the box culvert, during the excavation of existing fill in the Warehouse and Sports Facility additions, and during replacement of the fill by compacted soils. The scope of our work included part-time and full-time testing and inspection as requested by Reid Burton. The results of our tests have been reported under our Job No. 11,381 (reports 1 through 21) and Job No. 11,870 (reports 1 through 24). On the basis of our inspections and tests, we believe the fill placement was completed in substantial conformance with the recommendations contained within our reports for this project (Job No. 11,261 dated March 28, 1985 and Job No. 11,277 dated March 14, 1985).

Our firm will continue to test compaction of backfill for the culvert and Fructose Building foundations, as well as inspect footings and test concrete, on a part-time basis as you requested.

Please call if there are any questions regarding this statements.

Very truly yours,

CTL/THOMPSON, INC.

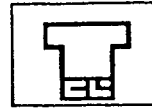
By _____
Ronald M. McOmber, P.E.

RMM:dw

(3 copies sent)

1cc: Reid Burton
P.O. Box 905
Fort Collins, Colorado 80522

Compaction Test Report



CTL/THOMPSON, INC.
CONSULTING GEOTECHNICAL
AND MATERIALS ENGINEERS

1971 WEST 12TH AVE., DENVER, CO 80204
(303) 825-0777

CLIENT:

PEPSI-COLA COMPANY
3801 BRIGHTON BOULEVARD
DENVER, COLORADO 80216

DATE: 10/09/85 JOB NO. 12285

REPORT NO. 1 SHEET 1 OF 1

SUBJECT PEPSI-COLA MANUFACTURING FACILITY
3801 BRIGHTON BOULEVARD
BOX CULVERT BACKFILL

TEST NO.	LOCATION	DEPTH FEET	TEST TYPE	LABORATORY		FIELD			SOIL TYPE
				MAX DENSITY PCF **	OMC %	DRY DENSITY PCF	MC %	COM-PACTION %	
1	STA. 10+8 LEFT SIDE OF BOX CULVERT	6.0	NUC	119	12.5	111	9.0	93	SAND SILTY
2	STA. 8+75 LEFT SIDE OF BOX CULVERT	5.0	NUC	119	12.5	110	8.2	92	" "
3	RETEST OF #1		NUC	119	12.5	115	11.5	97	" "
4	RETEST OF #2		NUC	119	12.5	116	10.2	97	" "
*	BELOW TOP OF CULVERT								
**	ESTIMATED BY A ONE POINT-PROCTOR								

SPECIFICATIONS: 95 % OF MAXIMUM ASTM D-1557

MOISTURE WITHIN 2 % OF OPTIMUM

TYPE OF COMPACTION EQUIPMENT AND NO. OF UNITS:

1) CAT 824 COMPACTOR

MOISTURE ADDED BY FIRE HOSE

THICKNESS OF LIFT 8-12 INCHES

TYPE OF EARTH MOVING EQUIPMENT AND NO. OF UNITS:

1) SCRAPER

THIS REPORT PRESENTS OPINIONS FORMED AS A RESULT OF OUR OBSERVATION OF FILL PLACEMENT AS WELL AS THE TESTS SHOWN ABOVE. WE HAVE RELIED UPON THE CONTRACTOR TO APPLY THE NECESSARY COMPACTIVE EFFORT AND MOISTURE TO ACHIEVE SPECIFIED COMPACTION DURING TIMES WHEN OUR OBSERVER IS NOT PRESENT, AND AT LOCATIONS OTHER THAN THOSE TESTED. TEST DATA ARE NOT THE SOLE BASIS FOR OPINIONS ON WHETHER THE FILL MEETS SPECIFICATIONS.

PROGRESS REPORT DURING OUR MORNING SITE VISIT THE CONTRACTOR WAS NOT READY FOR COMPACTION TESTS, AS PREVIOUSLY SCHEDULED. DURING THE AFTERNOON VISIT THE ABOVE TESTS WERE PERFORMED ON FILL PLACEMENT ALONG THE NORTH SIDE OF THE BOX CULVERT. THE CONTRACTOR REWORKED THE AREAS OF TESTS #1 AND 2 PRIOR TO RETESTS.

X) IN OUR OPINION, FILL COMPACTION MEETS SPECIFICATIONS AS INDICATED BY OUR OBSERVATIONS AND TEST NO.(S) 3-4

[] IN OUR OPINION, FILL COMPACTION DOES NOT MEET SPECIFICATIONS AS INDICATED BY OUR OBSERVATIONS AND TEST NO.(S)

AND SHOULD BE REWORKED

SCOPE OF OBSERVATION: [] FULL TIME; X) PERIODIC, ON CALL BASIS; X) CONTRACTOR'S OR CLIENT'S REPRESENTATIVE ADVISED DARREL

CTL/THOMPSON, INC.

DELMAR FISCHER

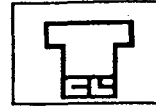
FIELD REPRESENTATIVE

DF:RS

APPROVED BY

RONALD M. MC OMBER P.E.

Compaction Test Report



CTL/THOMPSON, INC.
CONSULTING GEOTECHNICAL
AND MATERIALS ENGINEERS

1971 WEST 12TH AVE., DENVER, CO 80204
(303) 825-0777

CLIENT:

PEPSI-COLA
3801 BRIGHTON BOULEVARD
DENVER, COLORADO 80216

DATE: 10/10/85 JOB NO. 12285
REPORT NO. 2 SHEET 1 OF 1
SUBJECT PEPSI-COLA MANUFACTURING FACILITY
3801 BRIGHTON BOULEVARD
BOX CULVERT BACKFILL

TEST NO.	LOCATION	DEPTH FEET *	TEST TYPE	LABORATORY		FIELD			SOIL TYPE
				MAX DENSITY PCF	OMC %	DRY DENSITY PCF	MC %	COM-PACTON %	
5	STA. 8+6 LEFT SIDE OF BOX CULVERT	3.5	NUC	119	12.5	114	10.6	96	SAND SILTY
6	STA 9+50 LEFT SIDE OF BOX CULVERT	3.5	NUC	119	12.5	114	119	96	" "
*	BELOW TOP OF CULVERT								

SPECIFICATIONS: 95 % OF MAXIMUM ASTM D-1557

MOISTURE WITHIN 2 % OF OPTIMUM

TYPE OF COMPACTION EQUIPMENT AND NO. OF UNITS:

1) CAT 824 COMPACTOR

MOISTURE ADDED BY FIRE HOSE

THICKNESS OF LIFT 8-12 INCHES

TYPE OF EARTH MOVING EQUIPMENT AND NO. OF UNITS:

1) SCRAPER

THIS REPORT PRESENTS OPINIONS FORMED AS A RESULT OF OUR OBSERVATION OF FILL PLACEMENT, AS WELL AS THE TESTS SHOWN ABOVE. WE HAVE RELIED UPON THE CONTRACTOR TO APPLY THE NECESSARY COMPACTIVE EFFORT AND MOISTURE TO ACHIEVE SPECIFIED COMPACTION DURING TIMES WHEN OUR OBSERVER IS NOT PRESENT, AND AT LOCATIONS OTHER THAN THOSE TESTED. TEST DATA ARE NOT THE SOLE BASIS FOR OPINIONS ON WHETHER THE FILL MEETS SPECIFICATIONS.

PROGRESS REPORT DURING THIS VISIT THE CONTRACTOR CONTINUED FILL PLACEMENT ALONG THE NORTH SIDE OF THE BOX CULVERT.

☒ IN OUR OPINION, FILL COMPACTION MEETS SPECIFICATIONS AS INDICATED BY OUR OBSERVATIONS AND TEST NO.(S) 5-6

☐ IN OUR OPINION, FILL COMPACTION DOES NOT MEET SPECIFICATIONS AS INDICATED BY OUR OBSERVATIONS AND TEST NO.(S)

AND SHOULD BE REWORKED

SCOPE OF OBSERVATION: ☐ FULL TIME; ☒ PERIODIC, ON CALL BASIS; ☒ CONTRACTOR'S OR CLIENT'S REPRESENTATIVE ADVISED DARREL

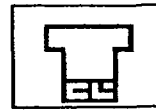
DELMAR FISCHER

FIELD REPRESENTATIVE
DF:RS

CTL/THOMPSON, INC.

APPROVED BY

RONALD M. MC OMBER P.E.



CTL/THOMPSON, INC.
CONSULTING GEOTECHNICAL
AND MATERIALS ENGINEERS

1971 WEST 12TH AVE., DENVER, CO 80204
(303) 825-0777

CLIENT: PEPSI COLA COMPANY
3801 BRIGHTON BOULEVARD
DENVER, COLORADO 80216

DATE: 10-11-85 JOB. NO. 12285
REPORT NO. 3 SHEET 1 OF 1
SUBJECT _____

PEPSI COLA MANUFACTURING FACILITY
3801 BRIGHTON BLVD.
BOX CULVERT BACKFILL

TEST NO.	LOCATION	DEPTH FEET *	TEST TYPE	LABORATORY		FIELD			SOIL TYPE
				MAX DENSITY PCF	OMC %	DRY DENSITY PCF	MC %	COMPACTION %	
7	STA. 9+70 30' LEFT FROM C.L. OF CULVERT	3.0	NUC	118	11.5	118	15.2	100	CURVE #4 JOB #11381
*	BELOW TOP OF CULVERT								

SPECIFICATIONS: 98 % OF MAXIMUM ASTM D 698
MOISTURE WITHIN -2 TO +3 % OF OPTIMUM

TYPE OF COMPACTION EQUIPMENT AND NO. OF UNITS:

(1) 824 CAT COMPACTOR

MOISTURE ADDED BY (1) FIRE HOSE

THICKNESS OF LIFT 8 INCHES

TYPE OF EARTH MOVING EQUIPMENT AND NO. OF UNITS:

(1) FRONT LOADER. (1) SCRAPER

THIS REPORT PRESENTS OPINIONS FORMED AS A RESULT OF OUR OBSERVATION OF FILL PLACEMENT, AS WELL AS THE TESTS SHOWN ABOVE. WE HAVE RELIED UPON THE CONTRACTOR TO APPLY THE NECESSARY COMPACTIVE EFFORT AND MOISTURE TO ACHIEVE SPECIFIED COMPACTION DURING TIMES WHEN OUR OBSERVER IS NOT PRESENT, AND AT LOCATIONS OTHER THAN THOSE TESTED. TEST DATA ARE NOT THE SOLE BASIS FOR OPINIONS ON WHETHER THE FILL MEETS SPECIFICATIONS.

PROGRESS REPORT DURING OUR MORNING SITE VISIT THE CONTRACTOR CONTINUED FILL PLACEMENT
ON THE NORTH SIDE OF THE BOX CULVERT FROM STATION 10+70 TO 8+10. DURING OUR AFTER-
NOON VISIT THE CONTRACTOR WAS PLACING FILL FOR THE TEMPORARY RAMP AT STATION 8+10.
THE RAMP IS BEING INSTALLED TO PROVIDE ACCESS TO THE SOUTH SIDE OF THE BOX CULVERT.
THE CONTRACTOR INDICATED THIS RAMP FILL WOULD BE REMOVED WHEN FILL PLACEMENT IS
COMPLETED EAST OF STATION 8+10.

☒ IN OUR OPINION, FILL COMPACTION MEETS SPECIFICATIONS AS INDICATED BY OUR OBSERVATIONS AND TEST NO.(S) 7

☐ IN OUR OPINION, FILL COMPACTION DOES NOT MEET SPECIFICATIONS AS INDICATED BY OUR OBSERVATIONS AND TEST NO.(S) _____

AND SHOULD BE REWORKED

SCOPE OF OBSERVATION: ☐ FULL TIME; ☒ PERIODIC, ON CALL BASIS; ☒ CONTRACTOR'S OR CLIENT'S REPRESENTATIVE ADVISED DARREL

CTL/THOMPSON, INC.

DELMAR FISCHER

FIELD REPRESENTATIVE

APPROVED BY

RONALD M. MC OMBER, P.E.

DF:PV

Compaction Test Report



CTL/THOMPSON, INC.
CONSULTING GEOTECHNICAL
AND MATERIALS ENGINEERS
1971 WEST 12TH AVE., DENVER, CO 80204
(303) 825-0777

CLIENT: PEPSI COLA COMPANY
3801 BRIGHTON BOULEVARD
DENVER, COLORADO 80216

DATE: 10-14-85 JOB NO. 12285
REPORT NO. 4 SHEET 1 OF 2
SUBJECT

PEPSI COLA MANUFACTURING FACILITY
3801 BRIGHTON BOULEVARD
BOX CULVERT BACKFILL

TEST NO.	LOCATION	DEPTH FEET *	TEST TYPE	LABORATORY		FIELD			SOIL TYPE
				MAX DENSITY PCF	OMC %	DRY DENSITY PCF	MC %	COM-PACTION %	
8	STA. 9+50 35' RIGHT FROM C.L. OF BOX CULVERT	9.0	NUC	119**	12.5	114	10.8	96***	SAND SILTY
9	STA. 11+00 20' RIGHT FROM C.L. OF BOX CULVERT	8.0	NUC	113	16.0	110	14.0	97	CURVE #3
10	STA. 11+10 30' RIGHT FROM C.L. OF BOX CULVERT	6.0	NUC	118	11.5	117	12.7	99	JOB #11381
11	STA. 11+10 25' RIGHT FROM C.L. OF BOX CULVERT	4.0	NUC	118	11.5	116	12.7	98	CURVE #4
									JOB #11381
*	BELOW TOP OF CULVERT								
**	ESTIMATED BY A ONE-POINT								

***95

ASTM D 1557

SPECIFICATIONS: 98 % OF MAXIMUM ASTM D 698

MOISTURE WITHIN -2 TO +3 % OF OPTIMUM

TYPE OF COMPACTION EQUIPMENT AND NO. OF UNITS:

(1) 3 WHEEL PACTOR ROLLER

MOISTURE ADDED BY NATURAL

THICKNESS OF LIFT 8-12 INCHES

TYPE OF EARTH MOVING EQUIPMENT AND NO. OF UNITS:

(2) FRONT LOADERS

THIS REPORT PRESENTS OPINIONS FORMED AS A RESULT OF OUR OBSERVATION OF FILL PLACEMENT, AS WELL AS THE TESTS SHOWN ABOVE. WE HAVE RELIED UPON THE CONTRACTOR TO APPLY THE NECESSARY COMPACTIVE EFFORT AND MOISTURE TO ACHIEVE SPECIFIED COMPACTION DURING TIMES WHEN OUR OBSERVER IS NOT PRESENT, AND AT LOCATIONS OTHER THAN THOSE TESTED. TEST DATA ARE NOT THE SOLE BASIS FOR OPINIONS ON WHETHER THE FILL MEETS SPECIFICATIONS.

PROGRESS REPORT PRIOR TO OUR ARRIVAL THE CONTRACTOR PLACED APPROXIMATELY 3 FEET OF FILL MATERIAL ON THE SOUTH SIDE OF CULVERT FROM STATION 11+40 TO 8+50. THE CONTRACTOR INDICATED THE WATER THAT WAS PRESENT BEFORE FILL PLACEMENT WAS REMOVED BY PUMPING. THE FILL MATERIAL PLACED CONSISTED OF A MIXTURE OF ASPHALT DEBRIS AND A SILTY SAND. PROOF-ROLLING INDICATED THIS FILL AREA WAS STABLE EXCEPT FOR AN AREA NEAR STATION 8+90. THE CONTRACTOR REMOVED APPROXIMATELY 3 FEET OF SOFT WET MATERIAL FROM THIS AREA, BACKFILLED AND RECOMPACTED. (SEE CONTINUED ON SHEET 2).

☒ IN OUR OPINION, FILL COMPACTION MEETS SPECIFICATIONS AS INDICATED BY OUR OBSERVATIONS AND TEST NO.(S) 8-11

☐ IN OUR OPINION, FILL COMPACTION DOES NOT MEET SPECIFICATIONS AS INDICATED BY OUR OBSERVATIONS AND TEST NO.(S)

AND SHOULD BE REWORKED

SCOPE OF OBSERVATION: ☐ FULL TIME; ☐ PERIODIC, ON CALL BASIS; ☐ CONTRACTOR'S OR CLIENT'S REPRESENTATIVE ADVISED

CTL/THOMPSON, INC.

DELMAR FISCHER

FIELD REPRESENTATIVE

APPROVED BY

RONALD M. MC OMBER, P.E.

DF:PV



CTL/THOMPSON, INC.
CONSULTING GEOTECHNICAL
AND MATERIALS ENGINEERS

1971 WEST 12TH AVE., DENVER, CO 80204
(303) 825-0777

CLIENT: PEPSI COLA COMPANY
3801 BRIGHTON BOULEVARD
DENVER, COLORADO 80216

DATE: 10-14-85 JOB NO. 12285

REPORT NO. 4 SHEET 2 OF 2

SUBJECT

PEPSI COLA MANUFACTURING FACILITY
3801 BRIGHTON BOULEVARD
BOX CULVERT BACKFILL

[illegible]

SPECIFICATIONS: _____ % OF MAXIMUM _____

MOISTURE WITHIN _____ % OF OPTIMUM

TYPE OF COMPACTION EQUIPMENT AND NO. OF UNITS:

MOISTURE ADDED BY _____

THICKNESS OF LIFT _____ INCHES

TYPE OF EARTH MOVING EQUIPMENT AND NO. OF UNITS:

THIS REPORT PRESENTS OPINIONS FORMED AS A RESULT OF OUR OBSERVATION OF FILL PLACEMENT, AS WELL AS THE TESTS SHOWN ABOVE. WE HAVE RELIED UPON THE CONTRACTOR TO APPLY THE NECESSARY COMPACTIVE EFFORT AND MOISTURE TO ACHIEVE SPECIFIED COMPACTION DURING TIMES WHEN OUR OBSERVER IS NOT PRESENT, AND AT LOCATIONS OTHER THAN THOSE TESTED. TEST DATA ARE NOT THE SOLE BASIS FOR OPINIONS ON WHETHER THE FILL MEETS SPECIFICATIONS.

PROGRESS REPORT DURING SUBSEQUENT PROOF-ROLLING THIS AREA APPEARED STABLE. TEST 10
AND 11 WERE PERFORMED ON FILL PLACEMENT FOR RAMP ACCESS BEING INSTALLED
AT APPROXIMATE STATION 11+10.

☐ IN OUR OPINION, FILL COMPACTION MEETS SPECIFICATIONS AS INDICATED BY OUR OBSERVATIONS AND TEST NO. (S) _____

☐ IN OUR OPINION, FILL COMPACTION DOES NOT MEET SPECIFICATIONS AS INDICATED BY OUR OBSERVATIONS AND TEST NO.(S)

AND SHOULD BE REWORKED

SCOPE OF OBSERVATION: ☒ FULL TIME; ☐ PERIODIC, ON CALL BASIS; ☐ CONTRACTOR'S OR CLIENT'S REPRESENTATIVE ADVISED _____

CTL/THOMPSON, INC.

DELMAR FISCHER
FIELD REPRESENTATIVE

APPROVED BY

RONALD M. MC OMBER, P.E.

DF:PV

Compaction Test Report



CTL/THOMPSON, INC.
CONSULTING GEOTECHNICAL
AND MATERIALS ENGINEERS

1971 WEST 12TH AVE., DENVER, CO 80204
(303) 825-0777

CLIENT:

PEPSI-COLORADO COMPANY
3801 BRIGHTON BOULEVARD
DENVER, COLORADO 80216

DATE: 10/15/85 JOB NO. 12285

REPORT NO. 5 SHEET 1 OF 1

SUBJECT PEPSI-COLA MANUFACTURING FACILITY
3801 BRIGHTON BOULEVARD
BOX CULVERT BACKFILL

TEST NO.	LOCATION	DEPTH FEET *	TEST TYPE	LABORATORY		FIELD			SOIL TYPE
				MAX DENSITY PCF	OMC %	DRY DENSITY PCF	MC %	COMPACTION %	
12	WING WALL STA. 11+45	5.0	NUC	**	12.5	115	12.4	97	SAND
	9' LEFT			119					SILTY
13	BOX CULVERT STA. 10+90	4.0	NUC		11.3	113	9.2	93	CURVE #3
	20' RIGHT			122					JOB #11870
14	RETEST OF #13		NUC	122	11.3	117	8.6	96	"
15	BOX CULVERT STA 9+90	1.0	NUC		11.3	123	11.2	100+	"
	35' RIGHT			122					"
16	BOX CULVERT STA. 11+00	1.0	NUC		7.5	124	7.2	95	CURVE #1
	30' RIGHT			130					JOB #11870
*	BELOW TOP OF CULVERT								
**	ESTIMATED BY A ONE-POINT PROCTOR.								

SPECIFICATIONS: 95 % OF MAXIMUM ASTM D-1557

MOISTURE WITHIN +2 % OF OPTIMUM

TYPE OF COMPACTION EQUIPMENT AND NO. OF UNITS:

1) PACTOR WIRE WHEEL ROLLER

MOISTURE ADDED BY 1) FIRE HOSE

THICKNESS OF LIFT 10 INCHES

TYPE OF EARTH MOVING EQUIPMENT AND NO. OF UNITS:

2) SCRAPERS

THIS REPORT PRESENTS OPINIONS FORMED AS A RESULT OF OUR OBSERVATION OF FILL PLACEMENT, AS WELL AS THE TESTS SHOWN ABOVE. WE HAVE RELIED UPON THE CONTRACTOR TO APPLY THE NECESSARY COMPACTION EFFORT AND MOISTURE TO ACHIEVE SPECIFIED COMPACTION DURING TIMES WHEN OUR OBSERVER IS NOT PRESENT, AND AT LOCATIONS OTHER THAN THOSE TESTED. TEST DATA ARE NOT THE SOLE BASIS FOR OPINIONS ON WHETHER THE FILL MEETS SPECIFICATIONS.

PROGRESS REPORT THE CONTRACTOR CONTINUES PLACING FILL MATERIAL ON THE SOUTH SIDE OF THE BOX CULVERT. THE CONTRACTOR RECOMPACTIONED THE AREA OF TEST #13 PRIOR TO THE RETEST.

IN OUR OPINION, FILL COMPACTION MEETS SPECIFICATIONS AS INDICATED BY OUR OBSERVATIONS AND TEST NO.(S) 12, 14-16

IN OUR OPINION, FILL COMPACTION DOES NOT MEET SPECIFICATIONS AS INDICATED BY OUR OBSERVATIONS AND TEST NO.(S)

AND SHOULD BE REWORKED

SCOPE OF OBSERVATION: ☐ FULL TIME; ☒ PERIODIC, ON CALL BASIS; ☒ CONTRACTOR'S OR CLIENT'S REPRESENTATIVE ADVISED DARREL

DELMAR FISCHER

FIELD REPRESENTATIVE
DF:RS

CTL/THOMPSON, INC.

APPROVED BY

RONALD M. MC OMBER P.E.

Compaction Test Report



CTL/THOMPSON, INC.
CONSULTING GEOTECHNICAL
AND MATERIALS ENGINEERS

1971 WEST 12TH AVE., DENVER, CO 80204
(303) 825-0777

CLIENT:

PEPSI COLA
3801 BRIGHTON BOULEVARD
DENVER, COLORADO 80216

DATE: 10/16/85 JOB NO. 12285

REPORT NO. 6 SHEET 1 OF 1

SUBJECT **PEPSI-COLA MANUFACTURING FACILITY**
3801 BRIGHTON BOULEVARD
BOX CULVERT BACKFILL

TEST NO.	LOCATION	DEPTH FEET *	TEST TYPE	LABORATORY		FIELD			SOIL TYPE
				MAX DENSITY PCF	OMC %	DRY DENSITY PCF	MC %	COMPACTION %	
17	STA. 9+90								CURVE #3
	20' LEFT	0.0	NUC	122	11.2	117	8.9	96	JOB #11870
18	STA. 9+60								
	25' RIGHT	0.0	NUC	122	11.2	124	10.1	100+	
19	STA. 8+55							**	CURVE #3
	30' RIGHT	0.0	NUC	113	16.0	116	14.0	100+	JOB #11381
20	STA. 10+50								CURVE #3
	25' LEFT	+2.0	NUC	122	11.2	110	12.5	90	JOB #11870
*	FROM TOP OF CULVERT								
**	98% OF MAXIMUM STANDARD ASTM D-698								

SPECIFICATIONS: 95 % OF MAXIMUM ASTM D-1557

MOISTURE WITHIN +2 % OF OPTIMUM

TYPE OF COMPACTION EQUIPMENT AND NO. OF UNITS:

1) PACTOR WIRE WHEEL ROLLER

MOISTURE ADDED BY 1) FIRE HOSE

LIFT THICKNESS OF LIFT 10 INCHES

TYPE OF EARTH MOVING EQUIPMENT AND NO. OF UNITS:

2) SCRAPERS

THIS REPORT PRESENTS OPINIONS FORMED AS A RESULT OF OUR OBSERVATION OF FILL PLACEMENT, AS WELL AS THE TESTS SHOWN ABOVE. WE HAVE RELIED UPON THE CONTRACTOR TO APPLY THE NECESSARY COMPACTION EFFORT AND MOISTURE TO ACHIEVE SPECIFIED COMPACTION DURING TIMES WHEN OUR OBSERVER IS NOT PRESENT, AND AT LOCATIONS OTHER THAN THOSE TESTED. TEST DATA ARE NOT THE SOLE BASIS FOR OPINIONS ON WHETHER THE FILL MEETS SPECIFICATIONS.

PROGRESS REPORT THE CONTRACTOR CONTINUES FILL PLACEMENT ON THE SOUTH SIDE OF THE BOX CULVERT. WE ADVISED THE CONTRACTOR TO RECOMPACT THE AREA OF TEST #20.

IN OUR OPINION, FILL COMPACTION MEETS SPECIFICATIONS AS INDICATED BY OUR OBSERVATIONS AND TEST NO.(S) 17-19

IN OUR OPINION, FILL COMPACTION DOES NOT MEET SPECIFICATIONS AS INDICATED BY OUR OBSERVATIONS AND TEST NO.(S) 20

AND SHOULD BE REWORKED

SCOPE OF OBSERVATION: ☐ FULL TIME; ☒ PERIODIC, ON CALL BASIS; ☒ CONTRACTOR'S OR CLIENT'S REPRESENTATIVE ADVISED DARREL

DELMAR FISCHER

FIELD REPRESENTATIVE
DF:RS

CTL/THOMPSON, INC.

APPROVED BY
RONALD M. MC OMBER P.E.

Compaction Test Report



CTL/THOMPSON, INC.
CONSULTING GEOTECHNICAL
AND MATERIALS ENGINEERS

1971 WEST 12TH AVE., DENVER, CO 80204
(303) 825-0777

CLIENT: PEPSI COLA COMPANY
3801 BRIGHTON BOULEVARD
DENVER, COLORADO 80216

DATE: 11-2-85 JOB NO. 12285
REPORT NO. 7 SHEET 1 OF 1
SUBJECT

PEPSI-COLA MANUFACTURING FACILITY
3801 BRIGHTON BLVD.
BOX CULVERT BACKFILL

TEST NO.	LOCATION	DEPTH FEET *	TEST TYPE	LABORATORY		FIELD			SOIL TYPE
				MAX DENSITY PCF	OMC %	DRY DENSITY PCF	MC %	COMPACTION %	
21	STA. 10+60 ON C.L. OF THE CULVERT	11.0	NUC	126.5	10.0	122	11.6	96	CURVE #2 JOB #11870
22	STA. 10+40 ON C.L. OF THE CULVERT	10.0	NUC	126.5	10.0	120	11.1	95	" "
23	STA. 10+85 12' LEFT FROM C.L. OF CULVERT	10.0	NUC	126.5	10.0	123	11.0	97	" "
24	STA. 9+60 ON C.L. OF THE CULVERT	4.0	NUC	118	11.5	116	12.3	98	CURVE #4 JOB #11381
25	STA. 9+16 6' RIGHT FROM C.L. OF THE CULVERT	2.0	NUC	118	11.5	119	11.4	100+	" "
26	STA. 10+63 36' RIGHT FROM C.L. OF THE CULVERT	8.0	NUC	126.5	10.0	121	11.6	96	CURVE #2 JOB #11870
*	BELOW GRADE								

SPECIFICATIONS: 95 % OF MAXIMUM ASTM D 1557

MOISTURE WITHIN ± 2 % OF OPTIMUM

TYPE OF COMPACTION EQUIPMENT AND NO. OF UNITS:

(1) 'REX' ROLLER

MOISTURE ADDED BY (1) WATER TRUCK

THICKNESS OF LIFT 8 INCHES

TYPE OF EARTH MOVING EQUIPMENT AND NO. OF UNITS:

(2) SCRAPERS

THIS REPORT PRESENTS OPINIONS FORMED AS A RESULT OF OUR OBSERVATION OF FILL PLACEMENT, AS WELL AS THE TESTS SHOWN ABOVE. WE HAVE RELIED UPON THE CONTRACTOR TO APPLY THE NECESSARY COMPACTIVE EFFORT AND MOISTURE TO ACHIEVE SPECIFIED COMPACTION DURING TIMES WHEN OUR OBSERVER IS NOT PRESENT, AND AT LOCATIONS OTHER THAN THOSE TESTED. TEST DATA ARE NOT THE SOLE BASIS FOR OPINIONS ON WHETHER THE FILL MEETS SPECIFICATIONS.

PROGRESS REPORT THE CONTRACTOR RESUMED THE BACKFILL OF THE BOX CULVERT FROM APPROXIMATE STATION 8+50 TO 11+10.

IN OUR OPINION, FILL COMPACTION MEETS SPECIFICATIONS AS INDICATED BY OUR OBSERVATIONS AND TEST NO.(S) 21-26

IN OUR OPINION, FILL COMPACTION DOES NOT MEET SPECIFICATIONS AS INDICATED BY OUR OBSERVATIONS AND TEST NO.(S) AND SHOULD BE REWORKED

SCOPE OF OBSERVATION: ☐ FULL TIME; ☒ PERIODIC, ON CALL BASIS; ☒ CONTRACTOR'S OR CLIENT'S REPRESENTATIVE ADVISED DARREL

CTL/THOMPSON, INC.

DELMAR FISCHER/JIM CARETTO

FIELD REPRESENTATIVE

APPROVED BY

RONALD M. MC OMBER, P.E.

JC:PV



CTL/THOMPSON, INC.
CONSULTING GEOTECHNICAL
AND MATERIALS ENGINEERS

1971 WEST 12TH AVE., DENVER, CO 80204
(303) 825-0777

CLIENT: PEPSI COLA COMPANY
3801 BRIGHTON BOULEVARD
DENVER, COLORADO 80216

DATE: 11-8-85 JOB NO. 12285
REPORT NO. 12 SHEET 1 OF 1
SUBJECT

PEPSI-COLA MANUFACTURING FACILITY
3801 BRIGHTON BLVD.
BOX CULVERT BACKFILL

TEST NO.	LOCATION	DEPTH FEET *	TEST TYPE	LABORATORY		FIELD			SOIL TYPE
				MAX DENSITY PCF	OMC %	DRY DENSITY PCF	MC %	COM-PACTION %	
	STA. 7+50, 15' RIGHT FROM C.L. OF THE BOX CULVERT	12.0	NUC	124.5	9.5	120	8.8	96	CURVE #2 JOB #11381
40	STA. 6+30, 8' RIGHT FROM C.L. OF THE BOX CULVERT	12.0	NUC	124.5	9.5	120	11.8	96	" "
41									
*	BELOW GRADE								

PECIFICATIONS: 95 % OF MAXIMUM ASTM D 1557
MOISTURE WITHIN + 2 % OF OPTIMUM

TYPE OF COMPACTION EQUIPMENT AND NO. OF UNITS:

~~(1) SHEEPSFOOT ROLLER~~

MOISTURE ADDED BY (1) WATER TRUCK

THICKNESS OF LIFT 8-10 INCHES

TYPE OF EARTH MOVING EQUIPMENT AND NO. OF UNITS:

~~(2) SCRAPERS (1) DOZER~~

PROGRESS REPORT THE CONTRACTOR CONTINUED TO PLACE FILL FROM THE MANHOLE AT STATION 9+88
WEST.

IN OUR OPINION, FILL COMPACTION MEETS SPECIFICATIONS AS INDICATED BY OUR OBSERVATIONS AND TEST NO.(S) 40-41

IN OUR OPINION, FILL COMPACTION DOES NOT MEET SPECIFICATIONS AS INDICATED BY OUR OBSERVATIONS AND TEST NO.(S) _____
AND SHOULD BE REWORKED

SCOPE OF OBSERVATION: ☐ FULL TIME; ☒ PERIODIC, ON CALL BASIS; ☒ CONTRACTOR'S OR CLIENT'S REPRESENTATIVE ADVISED RON REID BURTON**CTL/THOMPSON, INC.**

JAMES N. CARETTO
FIELD REPRESENTATIVE

APPROVED BY

RONALD M. MC OMBER, P.E.

3:PV



CTL/THOMPSON, INC.
CONSULTING GEOTECHNICAL
AND MATERIALS ENGINEERS

1971 WEST 12TH AVE., DENVER, CO 80204
(303) 825-0777

CLIENT: PEPSI-COLA COMPANY
3801 BRIGHTON BOULEVARD
DENVER, COLORADO 80216

DATE: 11-12-85 JOB. NO. 12285
REPORT NO. 13 SHEET 1 OF 1
SUBJECT

PEPSI-COLA MANUFACTURING FACILITY
3801 BRIGHTON BOULEVARD
BOX CULVERT BACKFILL

TEST NO.	LOCATION	DEPTH FEET *	TEST TYPE	LABORATORY		FIELD			SOIL TYPE
				MAX DENSITY PCF	OMC %	DRY DENSITY PCF	MC %	COM-PACTION %	
42	STA. 8+25, 10' LEFT OF	2.0	NUC	122	11.3	110	13.2	90	CURVE #3
	BOX CULVERT								JOB #11870
43	STA. 4+70, 10' LEFT OF	2.0	NUC	122	11.3	108	11.3	89	" "
	BOX CULVERT								" "
44	STA. 11+70, 80' RIGHT OF	1.0	NUC	122	11.3	118	12.1	97	" "
	BOX CULVERT								" "
*	BELOW GRADE								
**	TO TOP OF CULVERT								

*** 95% ASTM D 1557

SPECIFICATIONS: 90 % OF MAXIMUM ASTM D 1557

MOISTURE WITHIN + 2 % OF OPTIMUM

TYPE OF COMPACTION EQUIPMENT AND NO. OF UNITS:

(1) SHEEPSFOOT

MOISTURE ADDED BY _____ NATURAL

THICKNESS OF LIFT 8-10 INCHES

TYPE OF EARTH MOVING EQUIPMENT AND NO. OF UNITS:

(2) SCRAPERS (1) DOZER

THIS REPORT PRESENTS OPINIONS FORMED AS A RESULT OF OUR OBSERVATION OF FILL PLACEMENT, AS WELL AS THE TESTS SHOWN ABOVE. WE HAVE RELIED UPON THE CONTRACTOR TO APPLY THE NECESSARY COMPACTIVE EFFORT AND MOISTURE TO ACHIEVE SPECIFIED COMPACTION DURING TIMES WHEN OUR OBSERVER IS NOT PRESENT, AND AT LOCATIONS OTHER THAN THOSE TESTED. TEST DATA ARE NOT THE SOLE BASIS FOR OPINIONS ON WHETHER THE FILL MEETS SPECIFICATIONS.

PROGRESS REPORT WE RECOMMENDED MORE COMPACTIVE EFFORT IN THE AREA LEFT OF THE BOX
CULVERT. THE CONTRACTOR INDICATED HE WOULD RECOMPACT THIS AREA AND REQUESTED
WE RETURN TOMORROW FOR RETESTS.

IN OUR OPINION, FILL COMPACTION MEETS SPECIFICATIONS AS INDICATED BY OUR OBSERVATIONS AND TEST NO.(S) 44

IN OUR OPINION, FILL COMPACTION DOES NOT MEET SPECIFICATIONS AS INDICATED BY OUR OBSERVATIONS AND TEST NO.(S) 42, 43

AND SHOULD BE REWORKED

SCOPE OF OBSERVATION: ☐ FULL TIME; ☒ PERIODIC, ON CALL BASIS; ☒ CONTRACTOR'S OR CLIENT'S REPRESENTATIVE ADVISED ~~REN (JOB FOREMAN)~~

CTL/THOMPSON, INC.

JAMES N. CARETTO
FIELD REPRESENTATIVE

APPROVED BY

RONALD M. MC OMBER, P.E.

2:PV

Compaction Test Report



CTL/THOMPSON, INC.
CONSULTING GEOTECHNICAL
AND MATERIALS ENGINEERS

1971 WEST 12TH AVE., DENVER, CO 80204
(303) 825-0777

CLIENT: PEPSI COLA COMPANY
3801 BRIGHTON BOULEVARD
DENVER, COLORADO 80216

DATE: 11-13-85 JOB NO. 12285
REPORT NO. 14 SHEET 1 OF 1
SUBJECT

PEPSI COLA MANUFACTURING FACILITY
3801 BRIGHTON BLVD.
BOX CULVERT BACKFILL

TEST NO.	LOCATION	DEPTH FEET *	TEST TYPE	LABORATORY		FIELD			SOIL TYPE
				MAX DENSITY PCF	OMC %	DRY DENSITY PCF	MC %	COMPACTION %	
42A	RETEST OF #42		NUC	122	11.3	113	12.5	93**	CURVE #3 JOB #11870
43A	RETEST OF #43		NUC	122	11.3	113	12.2	93	" "
42B	RETEST OF #42		NUC	122	11.3	122	11.1	100	" "
45	STA. 7+05 10' LEFT OF BOX CULVERT	0.0	NUC	122	11.3	109	11.5	89	" "
46	STA. 6+25 10' LEFT OF BOX CULVERT	0.0	NUC	122	11.3	108	13.6	89	" "
*	BELOW TOP OF CULVERT								
**	95% OF ASTM D 1557								

SPECIFICATIONS: 90 % OF MAXIMUM ASTM D 1557

MOISTURE WITHIN ± 2 % OF OPTIMUM

TYPE OF COMPACTION EQUIPMENT AND NO. OF UNITS:

(1) SHEEPSFOOT ROLLER

MOISTURE ADDED BY (1) WATER TRUCK

THICKNESS OF LIFT 6 TO 8 INCHES

TYPE OF EARTH MOVING EQUIPMENT AND NO. OF UNITS:

(2) SCRAPERS (1) DOZER

THIS REPORT PRESENTS OPINIONS FORMED AS A RESULT OF OUR OBSERVATION OF FILL PLACEMENT, AS WELL AS THE TESTS SHOWN ABOVE. WE HAVE RELIED UPON THE CONTRACTOR TO APPLY THE NECESSARY COMPACTIVE EFFORT AND MOISTURE TO ACHIEVE SPECIFIED COMPACTION DURING TIMES WHEN OUR OBSERVER IS NOT PRESENT, AND AT LOCATIONS OTHER THAN THOSE TESTED. TEST DATA ARE NOT THE SOLE BASIS FOR OPINIONS ON WHETHER THE FILL MEETS SPECIFICATIONS.

PROGRESS REPORT AT THE TIME OF OUR VISITS THE CONTRACTOR HAD REWORKED AND COMPLETED THE BACKFILL UP TO THE TOP OF THE BOX CULVERT LEFT OF CENTER LINE. THE CONTRACTOR WAS INFORMED OF THE RESULTS OF TEST 45, 46 AND WE RECOMMENDED MORE COMPACTIVE EFFORT BE APPLIED. NO RETEST ARE NECESSARY.

X IN OUR OPINION, FILL COMPACTION MEETS SPECIFICATIONS AS INDICATED BY OUR OBSERVATIONS AND TEST NO.(S) 43A, 42B, 45, 46

] IN OUR OPINION, FILL COMPACTION DOES NOT MEET SPECIFICATIONS AS INDICATED BY OUR OBSERVATIONS AND TEST NO.(S)

AND SHOULD BE REWORKED

COPE OF OBSERVATION:] FULL TIME; X PERIODIC, ON CALL BASIS; X CONTRACTOR'S OR CLIENT'S REPRESENTATIVE ADVISED RON (JOB FOREMAN)

JAMES N. CARETTO

CTL/THOMPSON, INC.

FIELD REPRESENTATIVE
JC:PV

APPROVED BY

RONALD M. MC OMBER, P.E.



CTL/THOMPSON, INC.
CONSULTING GEOTECHNICAL
AND MATERIALS ENGINEERS

1971 WEST 12TH AVE., DENVER, CO 80204
(303) 825-0777

CLIENT: PEPSI COLA COMPANY
3801 BRIGHTON BOULEVARD
DENVER, COLORADO 80216

DATE: 11-14-85 JOB. NO. 12285
REPORT NO. 15 SHEET 1 OF 1
SUBJECT _____

PEPSI COLA MANUFACTURING FACILITY
3801 BRIGHTON BLVD.
BOX CULVERT BACKFILL

TEST NO.	LOCATION	DEPTH FEET *	TEST TYPE	LABORATORY		FIELD			SOIL TYPE
				MAX DENSITY PCF	OMC %	DRY DENSITY PCF	MC %	COMPACTION %	
47	8+30 20' RIGHT OF BOX	5.0	NUC	126.5	10.0	126	10.1	99	CURVE #2
	CULVERT								JOB #11870
48	7+40 20' RIGHT OF BOX	+1.0	NUC	126.5	10.0	127	13.8	100	" "
	CULVERT								" "
49	6+80 20' RIGHT OF BOX	0.0	NUC	126.5	10.0	120	9.5	95**	" "
	CULVERT								" "
*	FROM TOP OF CULVERT (+ INDICATES ABOVE THE CULVERT STRUCTURE)								
**	90% OF ASTM D 1557								

SPECIFICATIONS: 95 % OF MAXIMUM ASTM D 1557

MOISTURE WITHIN + 2 % OF OPTIMUM

TYPE OF COMPACTION EQUIPMENT AND NO. OF UNITS:

(1) SHEEPSFOOT ROLLER

MOISTURE ADDED BY (1) WATER TRUCK

THICKNESS OF LIFT 6-8 INCHES

TYPE OF EARTH MOVING EQUIPMENT AND NO. OF UNITS:

(2) SCRAPERS, (1) DOZER

THIS REPORT PRESENTS OPINIONS FORMED AS A RESULT OF OUR OBSERVATION OF FILL PLACEMENT, AS WELL AS THE TESTS SHOWN ABOVE. WE HAVE RELIED UPON THE CONTRACTOR TO APPLY THE NECESSARY COMPACTIVE EFFORT AND MOISTURE TO ACHIEVE SPECIFIED COMPACTION DURING TIMES WHEN OUR OBSERVER IS NOT PRESENT, AND AT LOCATIONS OTHER THAN THOSE TESTED. TEST DATA ARE NOT THE SOLE BASIS FOR OPINIONS ON WHETHER THE FILL MEETS SPECIFICATIONS.

PROGRESS REPORT AT THE TIME OF THIS SITE VISIT THE CONTRACTOR WAS CONTINUING TO BACKFILL
THE BOX CULVERT.

IN OUR OPINION, FILL COMPACTION MEETS SPECIFICATIONS AS INDICATED BY OUR OBSERVATIONS AND TEST NO.(S) 47-49

☐ IN OUR OPINION, FILL COMPACTION DOES NOT MEET SPECIFICATIONS AS INDICATED BY OUR OBSERVATIONS AND TEST NO. (S) _____

AND SHOULD BE REWORKED

SCOPE OF OBSERVATION: ☐ FULL TIME; ☒ PERIODIC, ON CALL BASIS; ☒ CONTRACTOR'S OR CLIENT'S REPRESENTATIVE ADVISED RON (JOB FOREMAN)

CTL/THOMPSON, INC.

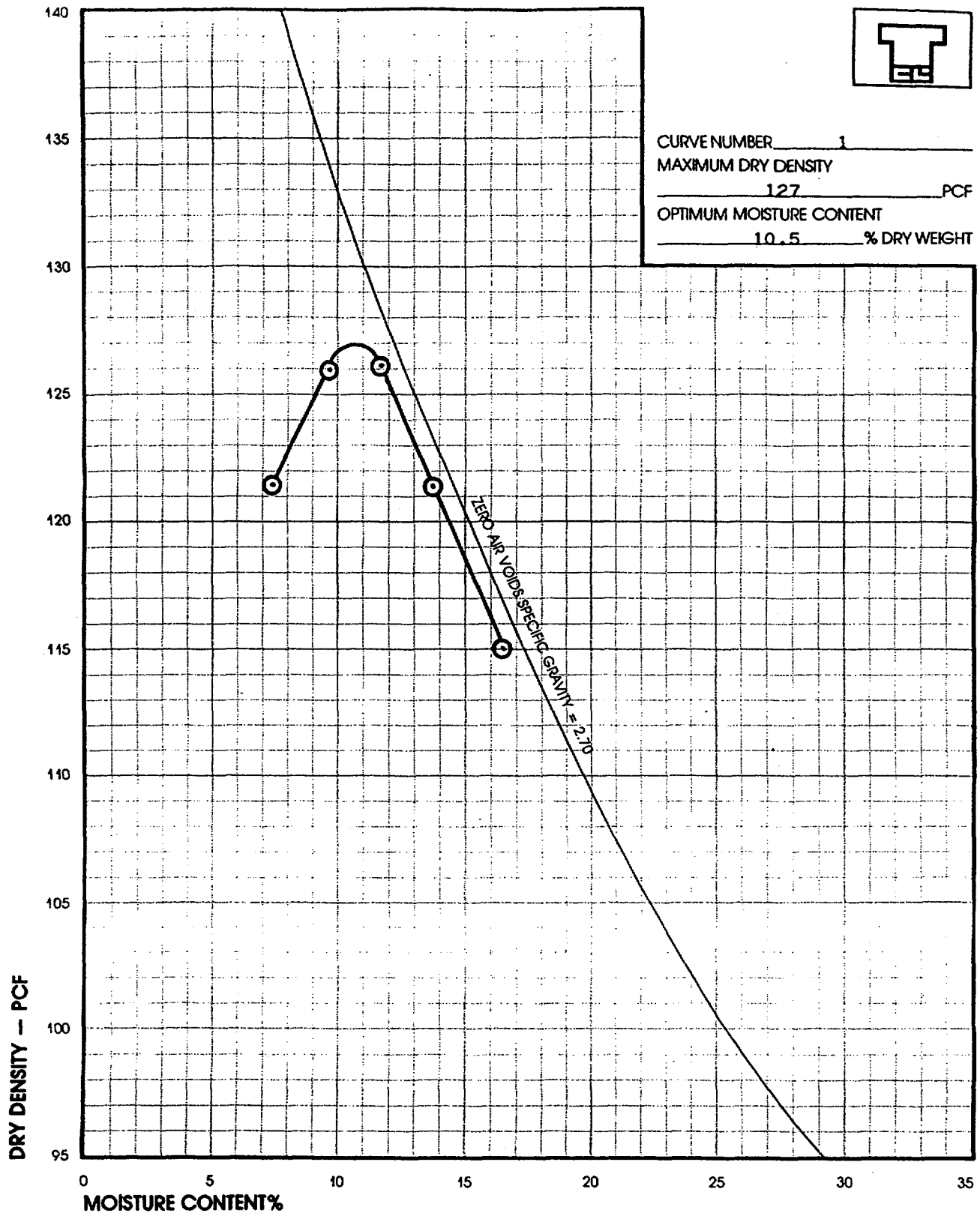
JAMES N. CARETTO

FIELD REPRESENTATIVE

APPROVED BY

RONALD M. MC OMBER, P.E.

JC:PV



Sample Description CLAY, SANDY, GRAVELLY
RED BROWN

Location ON -SITE PEPSI PLANT

Compaction Test Procedure ASTM D-1557-78
METHOD 'A'

LIQUID LIMIT _____ %
PLASTICITY INDEX _____ %
GRAVEL _____ %
SAND _____ %
SILT AND CLAY _____ %

**Compaction
Test Results**

JOB NO. 12285

Compaction Test Report



CTL/THOMPSON, INC.
CONSULTING GEOTECHNICAL
AND MATERIALS ENGINEERS
1971 WEST 12TH AVE., DENVER, CO 80204
(303) 825-0777

CLIENT: PEPSI COLA COMPANY
3801 BRIGHTON BOULEVARD
DENVER, COLORADO 80216

DATE: 1-17-86 JOB NO. 12285
REPORT NO. 16 SHEET 1 OF 1
SUBJECT

PEPSI COLA MANUFACTURING FACILITY
3801 BRIGHTON BLVD.
BOX CULVERT BACKFILL

TEST NO.	LOCATION **	DEPTH FEET *	TEST TYPE	LABORATORY		FIELD			SOIL TYPE
				MAX DENSITY PCF	OMC %	DRY DENSITY PCF	MC %	COM- PACTION %	
50	STA. 5 + 50	3.0	NUC	122	11.3	117	10.4	96	CURVE #3 JOB #11870
51	STA. 3 + 00	3.0	NUC	122	11.3	115	10.7	94	" "
52	STA. 3 + 30, 10'S OF SANITARY SEWER LINE	1.5	NUC	126.5	10.0	126	9.2	100	CURVE #2 JOB #11870
53	STA. 5 + 00	1.5	NUC	126.5	10.0	123	10.1	98	" "
54	STA. 6 + 50, 10'N OF SANITARY SEWER LINE	1.5	NUC	126.5	10.0	126	9.6	100	" "
*	BELOW GRADE								
**	STATIONS TAKEN FROM SANITARY SEWER LINE								

SPECIFICATIONS: 95 % OF MAXIMUM ASTM D 1557
MOISTURE WITHIN ± 3 % OF OPTIMUM

TYPE OF COMPACTION EQUIPMENT AND NO. OF UNITS:

(1) REX SHEEPSFOOT ROLLER

MOISTURE ADDED BY

THICKNESS OF LIFT 3-6 INCHES

TYPE OF EARTH MOVING EQUIPMENT AND NO. OF UNITS:

(2) SCRAPERS, (1) BACKHOE

THIS REPORT PRESENTS OPINIONS FORMED AS A RESULT OF OUR OBSERVATION OF FILL PLACEMENT, AS WELL AS THE TESTS SHOWN ABOVE. WE HAVE RELIED UPON THE CONTRACTOR TO APPLY THE NECESSARY COMPACTION EFFORT AND MOISTURE TO ACHIEVE SPECIFIED COMPACTION DURING TIMES WHEN OUR OBSERVER IS NOT PRESENT, AND AT LOCATIONS OTHER THAN THOSE TESTED. TEST DATA ARE NOT THE SOLE BASIS FOR OPINIONS ON WHETHER THE FILL MEETS SPECIFICATIONS.

PROGRESS REPORT PRIOR TO PLACING ADDITIONAL FILL OVER THE BOX CULVERT, TESTS 50 AND 51 WERE PERFORMED TO CHECK MOISTURE AND COMPACTION OF FILL COMPACTED PRIOR TO FREEZING. ADDITIONAL 2 TO 3 FEET OF FILL WILL BE PLACED BETWEEN STATIONS 2 + 50 AND 7 + 00.

☒ IN OUR OPINION, FILL COMPACTION MEETS SPECIFICATIONS AS INDICATED BY OUR OBSERVATIONS AND TEST NO.(S) 50-54
☐ IN OUR OPINION, FILL COMPACTION DOES NOT MEET SPECIFICATIONS AS INDICATED BY OUR OBSERVATIONS AND TEST NO.(S)

AND SHOULD BE REWORKED

SCOPE OF OBSERVATION: ☐ FULL TIME; ☒ PERIODIC, ON CALL BASIS; ☒ CONTRACTOR'S OR CLIENT'S REPRESENTATIVE ADVISED RON/ REID BURTON

CTL/THOMPSON, INC.

KIRK D. SKINNER

FIELD REPRESENTATIVE

APPROVED BY

RONALD M. MC OMBER, P.E.

KS:PV

Compaction Test Report



CTL/THOMPSON, INC.
CONSULTING GEOTECHNICAL
AND MATERIALS ENGINEERS

1971 WEST 12TH AVE., DENVER, CO 80204
(303) 825-0777

CLIENT: PEPSI COLA COMPANY
3801 BRIGHTON BOULEVARD
DENVER, COLORADO 80216

DATE: 1-20-86 JOB NO. 12285
REPORT NO. 17 SHEET 1 OF 1
SUBJECT

PEPSI COLA MANUFACTURING FACILITY
3801 BRIGHTON BOULEVARD
BOX CULVERT BACKFILL

TEST NO.	LOCATION	DEPTH FEET *	TEST TYPE	LABORATORY		FIELD			SOIL TYPE
				MAX DENSITY PCF	OMC %	DRY DENSITY PCF	MC %	COM-PACTION %	
55	STATION 6+80 @ SEWER LINE	0.0	NUC	122	11.3	121	11.4	99	CURVE #3 JOB #11870
56	STATION 4+75, 15'S OF SEWER LINE	0.0	NUC	126.5	10.0	122	12.2	96	CURVE #2 JOB #11870
57	STATION 2+50, 10'N OF SEWER LINE	0.0	NUC	128.5	9.5	129	9.5	** 100	CURVE #1 JOB #12167
*	BELOW GRADE								
**	98 PERCENT OF MAXIMUM ASTM D 698								

SPECIFICATIONS: 95 % OF MAXIMUM ASTM D 1557

MOISTURE WITHIN ± 3 % OF OPTIMUM

TYPE OF COMPACTION EQUIPMENT AND NO. OF UNITS:

(1) SHEEPSFOOT ROLLER (REX)

MOISTURE ADDED BY

THICKNESS OF LIFT 4-6 INCHES

TYPE OF EARTH MOVING EQUIPMENT AND NO. OF UNITS:

(2) SCRAPERS, (1) BLADE

THIS REPORT PRESENTS OPINIONS FORMED AS A RESULT OF OUR OBSERVATION OF FILL PLACEMENT AS WELL AS THE TESTS SHOWN ABOVE. WE HAVE RELIED UPON THE CONTRACTOR TO APPLY THE NECESSARY COMPACTION EFFORT AND MOISTURE TO ACHIEVE SPECIFIED COMPACTION DURING TIMES WHEN OUR OBSERVER IS NOT PRESENT, AND AT LOCATIONS OTHER THAN THOSE TESTED. TEST DATA ARE NOT THE SOLE BASIS FOR OPINIONS ON WHETHER THE FILL MEETS SPECIFICATIONS.

PROGRESS REPORT AS REQUESTED BY THE CONTRACTOR, THE SITE WAS VISITED TO PERFORM COMPACTION TESTS ON ADDITIONAL FILL BEING PLACED ON TOP OF THE BOX CULVERT, BETWEEN STATION 2+00 AND STATION 7+00.

☒ IN OUR OPINION, FILL COMPACTION MEETS SPECIFICATIONS AS INDICATED BY OUR OBSERVATIONS AND TEST NO.(S) 55-57

☐ IN OUR OPINION, FILL COMPACTION DOES NOT MEET SPECIFICATIONS AS INDICATED BY OUR OBSERVATIONS AND TEST NO.(S)

AND SHOULD BE REWORKED

SCOPE OF OBSERVATION: ☐ FULL TIME; ☒ PERIODIC, ON CALL BASIS; ☒ CONTRACTOR'S OR CLIENT'S REPRESENTATIVE ADVISED RON/REID BURTON

KIRK D. SKINNER

FIELD REPRESENTATIVE

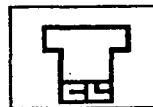
CTL/THOMPSON, INC.

APPROVED BY

RONALD M. MC OMBER, P.E.

KS:PV

Compaction Test Report



CTL/THOMPSON, INC.
CONSULTING GEOTECHNICAL
AND MATERIALS ENGINEERS

1971 WEST 12TH AVE., DENVER, CO 80204
(303) 825-0777

CLIENT:

PEPSI-COLA COMPANY OF DENVER
3801 BRIGHTON BOULEVARD
DENVER, COLORADO 80216
ATTN: MR. DON PATTON

DATE: 09/11/85 JOB NO. 12167

REPORT NO. 1 SHEET 1 OF 1

SUBJECT PEPSI-COLA PLANT
BUILDING ADDITION
3801 BRIGHTON BOULEVARD
UTILITY TRENCH BACKFILL

TEST NO.	LOCATION	DEPTH FEET *	TEST TYPE	LABORATORY		FIELD			SOIL TYPE
				MAX DENSITY PCF	OMC %	DRY DENSITY PCF	MC %	COMPACTION %	
1	GASLINE TRENCH BACKFILL 75' E. FROM N.E. COR. OF PARKING LOT	1.0	NUC	126.6	10.0	106	6.5	84	CURVE #2 JOB #11870
2	RETEST OF #1		NUC	126.5	10.0	109	7.2	86	" "
3	95' S. FROM N.E. COR. OF PARKING LOT	0.0	NUC	126.5	10.0	110	9.6	87	" "
4	15' S. FROM N.E. COR. OF PARKING LOT	0.5	NUC	122	11.3	106	10.0	87	CURVE #3 JOB #11870
*	BELOW GRADE								

SPECIFICATIONS: 95 % OF MAXIMUM ASTM D-1557
MOISTURE WITHIN ±2 % OF OPTIMUM

TYPE OF COMPACTION EQUIPMENT AND NO. OF UNITS:

1) VIBRATORY SHEEPSFOOT ROLLER

MOISTURE ADDED BY 1) WATER TRUCK

THICKNESS OF LIFT _____ INCHES

TYPE OF EARTH MOVING EQUIPMENT AND NO. OF UNITS:

1) FRONT END LOADER

THIS REPORT PRESENTS OPINIONS FORMED AS A RESULT OF OUR OBSERVATION OF FILL PLACEMENT, AS WELL AS THE TESTS SHOWN ABOVE. WE HAVE RELIED UPON THE CONTRACTOR TO APPLY THE NECESSARY COMPACTION EFFORT AND MOISTURE TO ACHIEVE SPECIFIED COMPACTION DURING TIMES WHEN OUR OBSERVER IS NOT PRESENT, AND AT LOCATIONS OTHER THAN THOSE TESTED. TEST DATA ARE NOT THE SOLE BASIS FOR OPINIONS ON WHETHER THE FILL MEETS SPECIFICATIONS.

PROGRESS REPORT PRIOR TO OUR SITE VISIT THE CONTRACTOR HAD BACKFILLED THE GAS LINE TRENCH. THE CONTRACTOR INDICATED THE DEPTH OF THE TRENCH WAS 3 TO 4 FEET WITH A WIDTH OF 12 TO 18 INCHES. THE CONTRACTOR ATTEMPTED TO COMPACT THE TRENCH BACKFILL FROM THE SURFACE WITH A VIBRATORY SHEEPSFOOT ROLLER. DUE TO THE WIDTH OF THE ROLLER EXCEEDING THE TRENCH WIDTH, COMPACTION OF BACKFILL WAS NOT EFFECTIVE. THE CONTRACTOR WAS ADVISED TO COMPACT THE TRENCH BACKFILL WITH A HYDRO-HAMMER.

☐ IN OUR OPINION, FILL COMPACTION MEETS SPECIFICATIONS AS INDICATED BY OUR OBSERVATIONS AND TEST NO.(S) _____

☒ IN OUR OPINION, FILL COMPACTION DOES NOT MEET SPECIFICATIONS AS INDICATED BY OUR OBSERVATIONS AND TEST NO.(S) 1-4

AND SHOULD BE REWORKED

SCOPE OF OBSERVATION: ☐ FULL TIME; ☒ PERIODIC, ON CALL BASIS; ☒ CONTRACTOR'S OR CLIENT'S REPRESENTATIVE ADVISED RON (REID-BARTON)

CTL/THOMPSON, INC.

DELMAR FISCHER

FIELD REPRESENTATIVE

DF;RS

APPROVED BY

RONALD M. MC OMBER P.E.



CTL/THOMPSON, INC.
CONSULTING GEOTECHNICAL
AND MATERIALS ENGINEERS

1971 WEST 12TH AVE., DENVER, CO 80204
(303) 825-0777

CLIENT:

PEPSI COLA COMPANY OF DENVER
3801 BRIGHTON BOULEVARD
DENVER, COLORADO 80216
ATTN: DON PATTON

DATE: 09/12/85 JOB. NO. 12167

REPORT NO. 2 SHEET 1 OF 1

SUBJECT PEPSI-COLA PLANT
3801 BRIGHTON BOULEVARD
GAS LINE TRENCH BACKFILL

[illegible]

SPECIFICATIONS: 95 % OF MAXIMUM ASTM D-1557

MOISTURE WITHIN ±2 % OF OPTIMUM

TYPE OF COMPACTION EQUIPMENT AND NO. OF UNITS:

HYDRO-HAMMER

MOISTURE ADDED BY _____

THICKNESS OF LIFT _____ INCHES

TYPE OF EARTH MOVING EQUIPMENT AND NO. OF UNITS:

THIS REPORT PRESENTS OPINIONS FORMED AS A RESULT OF OUR OBSERVATION OF FILL PLACEMENT, AS WELL AS THE TESTS SHOWN ABOVE. WE HAVE RELIED UPON THE CONTRACTOR TO APPLY THE NECESSARY COMPACTIVE EFFORT AND MOISTURE TO ACHIEVE SPECIFIED COMPACTION DURING TIMES WHEN OUR OBSERVER IS NOT PRESENT, AND AT LOCATIONS OTHER THAN THOSE TESTED. TEST DATA ARE NOT THE SOLE BASIS FOR OPINIONS ON WHETHER THE FILL MEETS SPECIFICATIONS.

PROGRESS REPORT PRIOR TO TESTING THE CONTRACTOR HAD RECOMPACTED THE GAS LINE TRENCH WITH A HYDRO-HAMMER.

☒ IN OUR OPINION, FILL COMPACTION MEETS SPECIFICATIONS AS INDICATED BY OUR OBSERVATIONS AND TEST NO. (S) _____

☒ IN OUR OPINION, FILL COMPACTION DOES NOT MEET SPECIFICATIONS AS INDICATED BY OUR OBSERVATIONS AND TEST NO.(S) 5, 6
AND SHOULD BE REWORKED

SCOPE OF OBSERVATION: ☐ FULL TIME; ☒ PERIODIC, ON CALL BASIS; ☒ CONTRACTOR'S OR CLIENT'S REPRESENTATIVE ADVISED RON/REID BURTON

DELMAR FISCHER

FIELD REPRESENTATIVE
DF:RS

CTL/THOMPSON INC.

APPROVED BY

RONALD M. MC OMBER P.E.

Compaction Test Report



CTL/THOMPSON, INC.
CONSULTING GEOTECHNICAL
AND MATERIALS ENGINEERS
1971 WEST 12TH AVE., DENVER, CO 80204
(303) 825-0777

CLIENT:

PEPSI-COLA COMPANY OF DENVER
3801 BRIGHTON BOULEVARD
DENVER, COLORADO 80216
ATTN: MR. DON PATTON

DATE: 09/13/85 JOB. NO. 12167

REPORT NO. 3 SHEET 1 OF 1

SUBJECT PEPSI-COLA PLANT
3801 BRIGHTON BOULEVARD
GASLINE TRENCH BACKFILL

TEST NO.	LOCATION	DEPTH FEET	TEST TYPE	LABORATORY		FIELD			SOIL TYPE
				MAX DENSITY PCF	OMC %	DRY DENSITY PCF	MC %	COMPACTION %	
7	75' N. FROM N.E. COR. OF PARKING LOT	1.4	SAND	126.5	10.0	105	5.6	83	CURVE #2 JOB #11870
8	35' W. FROM N.E. COR. OF PARKING LOT	1.5	SAND	126.5	10.0	105	8.0	83	" "
9	350' W. FROM C.L. OF BRIGHTON BOULEVARD	1.5	SAND	**	15.0	79	11.8	93	COAL CINDERS
10	75'S FROM N.E. COR. OF PARKING LOT	1.5	SAND	122	11.3	99	7.1	81	CURVE #1 JOB #11870
*	BELOW GRADE								
**	ESTIMATED BY A ONE-POINT PROCTOR								

SPECIFICATIONS: 95 % OF MAXIMUM ASTM D-1557
MOISTURE WITHIN ± 2 % OF OPTIMUM

TYPE OF COMPACTION EQUIPMENT AND NO. OF UNITS:

1) HYDRO-HAMMER

MOISTURE ADDED BY

THICKNESS OF LIFT INCHES

TYPE OF EARTH MOVING EQUIPMENT AND NO. OF UNITS:

THIS REPORT PRESENTS OPINIONS FORMED AS A RESULT OF OUR OBSERVATION OF FILL PLACEMENT, AS WELL AS THE TESTS SHOWN ABOVE. WE HAVE RELIED UPON THE CONTRACTOR TO APPLY THE NECESSARY COMPACTION EFFORT AND MOISTURE TO ACHIEVE SPECIFIED COMPACTION DURING TIMES WHEN OUR OBSERVER IS NOT PRESENT, AND AT LOCATIONS OTHER THAN THOSE TESTED. TEST DATA ARE NOT THE SOLE BASIS FOR OPINIONS ON WHETHER THE FILL MEETS SPECIFICATIONS.

PROGRESS REPORT THE CONTRACTOR CONTINUES THE RECOMPACTION OF THE GAS LINE TRENCH BACKFILL. OBSERVATION OF COMPACTION INDICATES THE BACKFILL MATERIAL MAYBE DISPLACING RATHER THAN COMPACTING DUE TO THE LOOSE EXISTING FILL SURROUNDING THE TRENCH BACKFILL. RON WITH REID-BURTON INDICATED RECOMPACTION WOULD CONTINUE AND ADDITIONAL REWORKING AND RECOMPACTION WOULD BE PERFORMED DURING THE PARKING LOT SUBGRADE PREPARATION.

☐ IN OUR OPINION, FILL COMPACTION MEETS SPECIFICATIONS AS INDICATED BY OUR OBSERVATIONS AND TEST NO.(S)

☒ IN OUR OPINION, FILL COMPACTION DOES NOT MEET SPECIFICATIONS AS INDICATED BY OUR OBSERVATIONS AND TEST NO.(S) 7-10
AND SHOULD BE REWORKED

SCOPE OF OBSERVATION: ☐ FULL TIME; ☒ PERIODIC, ON CALL BASIS; ☒ CONTRACTOR'S OR CLIENT'S REPRESENTATIVE ADVISED RON (REID/BURTON)

CTL/THOMPSON, INC.

DELMAR FISCHER
FIELD REPRESENTATIVE
DF:RS

APPROVED BY

RONALD M. MC OMBER P.E.



CTL/THOMPSON, INC.
CONSULTING GEOTECHNICAL
AND MATERIALS ENGINEERS

1971 WEST 12TH AVE., DENVER, CO 80204
(303) 825-0777

CLIENT:

PEPSI-COLA COMPANY OF DENVER
3801 BRIGHTON BOULEVARD
DENVER, COLORADO 80216
ATTN:MR DON PATTON

DATE: 09/16/85 JOB NO. 12167

REPORT NO. 4 SHEET 1 OF 1

SUBJECT PEPSI-COLA PLANT
3801 BRIGHTON BOULEVARD
GAS LINE TRENCH BACKFILL

[illegible]

SPECIFICATIONS: _____ % OF MAXIMUM _____

MOISTURE WITHIN _____ % OF OPTIMUM

TYPE OF COMPACTION EQUIPMENT AND NO. OF UNITS:

MOISTURE ADDED BY _____

THICKNESS OF LIFT _____ INCHES

TYPE OF EARTH MOVING EQUIPMENT AND NO. OF UNITS:

THIS REPORT PRESENTS OPINIONS FORMED AS A RESULT OF OUR OBSERVATION OF FILL PLACEMENT, AS WELL AS THE TESTS SHOWN ABOVE. WE HAVE RELIED UPON THE CONTRACTOR TO APPLY THE NECESSARY COMPACTIVE EFFORT AND MOISTURE TO ACHIEVE SPECIFIED COMPACTION DURING TIMES WHEN OUR OBSERVER IS NOT PRESENT AND AT LOCATIONS OTHER THAN THOSE TESTED. TEST DATA ARE NOT THE SOLE BASIS FOR OPINIONS ON WHETHER THE FILL MEETS SPECIFICATIONS.

PROGRESS REPORT DURING THIS SITE VISIT NO COMPACTION OF GAS LINE TRENCH BACKFILL WAS BEING PERFORMED. THE CONTRACTOR INFORMED US NO COMPACTION WOULD BE DONE DUE TO MECHANICAL FAILURE OF THE HYDRO-HAMMER.

☐ IN OUR OPINION, FILL COMPACTION MEETS SPECIFICATIONS AS INDICATED BY OUR OBSERVATIONS AND TEST NO.(S) _____

☐ IN OUR OPINION, FILL COMPACTION DOES NOT MEET SPECIFICATIONS AS INDICATED BY OUR OBSERVATIONS AND TEST NO.(S) _____

AND SHOULD BE REWORKED

SCOPE OF OBSERVATION: ☐ FULL TIME; ☒ PERIODIC, ON CALL BASIS; ☒ CONTRACTOR'S OR CLIENT'S REPRESENTATIVE ADVISED RON/REID-BURTON

CTL/THOMPSON, INC.

DELMAR FISCHER

FIELD REPRESENTATIVE
DF:RS

APPROVED BY

RONALD M. MC OMBER P.E.

Compaction Test Report



CTL/THOMPSON, INC.
CONSULTING GEOTECHNICAL
AND MATERIALS ENGINEERS

1971 WEST 12TH AVE. DENVER, CO 80204
(303) 825-0777

CLIENT: PEPSI-COLA COMPANY OF DENVER
3801 BRIGHTON BOULEVARD
DENVER, COLORADO 80216

ATTN: MR. DON PATTON

DATE: 9-30-85 JOB NO. 12167
REPORT NO. 6 SHEET 1 OF 1
SUBJECT

PEPSI-COLA PLANT
3801 BRIGHTON BOULEVARD
UTILITY TRENCH BACKFILL

TEST NO.	LOCATION	DEPTH FEET *	TEST TYPE	LABORATORY		FIELD			SOIL TYPE
				MAX DENSITY PCF	OMC %	DRY DENSITY PCF	MC %	COMPACTION %	
13	9'N, 5'W FROM S.E.	1.7	NUC	126.5	10.0	122	12.5	96	CURVE #2
	CORNER								JOB #11870
14	24'N, 7'W FROM S.E.	1.7	NUC	126.5	10.0	121	13.5	96	" "
	CORNER								" "
15	10'N, 35'E FROM S.E.	2.0	NUC	126.5	10.0	125	11.5	99	" "
	CORNER								" "
16	30'N, 60'E FROM S.E.	2.5	NUC	126.5	10.0	126	12.3	100	" "
	CORNER								" "
*	BELOW GRADE								

SPECIFICATIONS: 95 % OF MAXIMUM ASTM D 1557

MOISTURE WITHIN + 2 % OF OPTIMUM

TYPE OF COMPACTION EQUIPMENT AND NO. OF UNITS:

(1) BACKHOE MOUNTED TAMPING PLATE

MOISTURE ADDED BY NATURAL

THICKNESS OF LIFT 12 INCHES

TYPE OF EARTH MOVING EQUIPMENT AND NO. OF UNITS:

(1) BACKHOE - FRONT LOADER

THIS REPORT PRESENTS OPINIONS FORMED AS A RESULT OF OUR OBSERVATION OF FILL PLACEMENT, AS WELL AS THE TESTS SHOWN ABOVE. WE HAVE RELIED UPON THE CONTRACTOR TO APPLY THE NECESSARY COMPACTION EFFORT AND MOISTURE TO ACHIEVE SPECIFIED COMPACTION DURING TIMES WHEN OUR OBSERVER IS NOT PRESENT, AND AT LOCATIONS OTHER THAN THOSE TESTED. TEST DATA ARE NOT THE SOLE BASIS FOR OPINIONS ON WHETHER THE FILL MEETS SPECIFICATIONS.

PROGRESS REPORT DURING THESE TWO SITE VISITS THE CONTRACTOR WAS BACKFILLING ELECTRICAL CONDUIT TRENCH IN THE SOUTH EAST CORNER OF THE FRUCTOSE BUILDING.

☒ IN OUR OPINION, FILL COMPACTION MEETS SPECIFICATIONS AS INDICATED BY OUR OBSERVATIONS AND TEST NO.(S) 13-16

☐ IN OUR OPINION, FILL COMPACTION DOES NOT MEET SPECIFICATIONS AS INDICATED BY OUR OBSERVATIONS AND TEST NO.(S) _____

AND SHOULD BE REWORKED

SCOPE OF OBSERVATION: ☐ FULL TIME; ☒ PERIODIC, ON CALL BASIS; ☒ CONTRACTOR'S OR CLIENT'S REPRESENTATIVE ADVISED BACKHOE OPERATOR

CTL/THOMPSON, INC.

DELMAR FISCHER

FIELD REPRESENTATIVE

APPROVED BY

RONALD M. MC OMBER, P.E.

DF:PV

Compaction Test Report



CTL/THOMPSON, INC.
CONSULTING GEOTECHNICAL
AND MATERIALS ENGINEERS

1971 WEST 12TH AVE., DENVER, CO 80204
(303) 825-0777

CLIENT: PEPSI-COLA COMPANY OF DENVER
3801 BRIGHTON BOULEVARD
DENVER, COLORADO 80216

DATE: 10-1-85 JOB NO. 12167
REPORT NO. 7 SHEET 1 OF 1
SUBJECT

ATTN: MR. DON PATTON

PEPSI-COLA PLANT
3801 BRIGHTON BOULEVARD
UTILITY TRENCH BACKFILL

TEST NO.	LOCATION	DEPTH FEET *	TEST TYPE	LABORATORY		FIELD			SOIL TYPE
				MAX DENSITY PCF	OMC %	DRY DENSITY PCF	MC %	COM-PACTATION %	
	STORM SEWER MAIN ADJ. TO THE WEST SIDE OF RAIL SLAB								
	25'S FROM NORTH								
17	END	0.0	NUC	126.5	10.0	122	10.9	96	CURVE #2 JOB #11870
18	110'S FROM NORTH END	0.0	NUC	126.5	10.0	119	10.5	94	" "
	ELECTRICAL CONDUIT TRENCH								
	50'S FROM N.E. CORNER								
19	OF RAIL SLAB	0.0	NUC	126.5	10.0	120	10.9	95	" "
	100'S FROM N.E. CORNER								
20	OF RAIL SLAB	0.0	NUC	126.5	10.0	124	11.8	98	" "
*	BELOW GRADE								

SPECIFICATIONS: 95 % OF MAXIMUM ASTM D 1557

MOISTURE WITHIN 2 % OF OPTIMUM

TYPE OF COMPACTION EQUIPMENT AND NO. OF UNITS:

(1) BACKHOE MOUNTED TAMPING PLATE

(2) WHACKER TAMPERS

MOISTURE ADDED BY NATURAL

THICKNESS OF LIFT 12 INCHES

TYPE OF EARTH MOVING EQUIPMENT AND NO. OF UNITS:

(1) FRONT LOADER

THIS REPORT PRESENTS OPINIONS FORMED AS A RESULT OF OUR OBSERVATION OF FILL PLACEMENT, AS WELL AS THE TESTS SHOWN ABOVE. WE HAVE RELIED UPON THE CONTRACTOR TO APPLY THE NECESSARY COMPACTION EFFORT AND MOISTURE TO ACHIEVE SPECIFIED COMPACTION DURING TIMES WHEN OUR OBSERVER IS NOT PRESENT, AND AT LOCATIONS OTHER THAN THOSE TESTED. TEST DATA ARE NOT THE SOLE BASIS FOR OPINIONS ON WHETHER THE FILL MEETS SPECIFICATIONS.

PROGRESS REPORT DURING THIS SITE VISIT THE CONTRACTOR WAS BACKFILLING AND COMPACTING
STORM SEWER AND ELECTRICAL TRENCH IN THE RAIL HEAD AREA ADJACENT TO THE FRUCTOSE
BUILDING. THE CONTRACTOR WAS ADVISED TO RECOMPACT THE AREA OF FAILING TEST #18.
NO RETEST WILL BE NECESSARY.

☒ IN OUR OPINION, FILL COMPACTION MEETS SPECIFICATIONS AS INDICATED BY OUR OBSERVATIONS AND TEST NO.(S) 17-20

☐ IN OUR OPINION, FILL COMPACTION DOES NOT MEET SPECIFICATIONS AS INDICATED BY OUR OBSERVATIONS AND TEST NO.(S) _____

AND SHOULD BE REWORKED

SCOPE OF OBSERVATION: ☐ FULL TIME; ☒ PERIODIC, ON CALL BASIS; ☒ CONTRACTOR'S OR CLIENT'S REPRESENTATIVE ADVISED

CTL/THOMPSON, INC.

DELMAR FISCHER

FIELD REPRESENTATIVE

APPROVED BY

RONALD M. MC OMBER, P.E.

F:PV

Compaction Test Report



CTL/THOMPSON, INC.
CONSULTING GEOTECHNICAL
AND MATERIALS ENGINEERS

1971 WEST 12TH AVE., DENVER, CO 80204
(303) 825-0777

CLIENT: PEPSI-COLA COMPANY OF DENVER
3801 BRIGHTON BOULEVARD
DENVER, COLORADO 80216

ATTN: MR. DON PATTON

DATE: 10-2-85 JOB NO. 12167
REPORT NO. 8 SHEET 1 OF 1
SUBJECT

PEPSI-COLA PLANT
3801 BRIGHTON BLVD.
UTILITY TRENCH BACKFILL

TEST NO.	LOCATION	DEPTH FEET *	TEST TYPE	LABORATORY		FIELD			SOIL TYPE
				MAX DENSITY PCF	OMC %	DRY DENSITY PCF	MC %	COMPACTION %	
21	STORM SEWER THE SE CORNER OF ERUCTOSE BUILDING	3.5	NLC	126.5	10.0	121	9.6	96	CURVE #2 JOB #11870
22	FIRST SERVICE LINE FROM THE N. END OF RAIL PAD	0.5	NLC	126.5	10.0	120	10.9	95	" "
23	SECOND SERVICE LINE FROM THE N. END OF RAIL PAD	0.5	NLC	126.5	10.0	123	9.6	97	" "
*	BELOW GRADE								

SPECIFICATIONS: 95 % OF MAXIMUM ASTM D 1557

MOISTURE WITHIN ± 2 % OF OPTIMUM

TYPE OF COMPACTION EQUIPMENT AND NO. OF UNITS:

(2) WHACKER TAMPERS

MOISTURE ADDED BY NATURAL

THICKNESS OF LIFT 10-12 INCHES

TYPE OF EARTH MOVING EQUIPMENT AND NO. OF UNITS:

(1) FRONT END LOADER

PROGRESS REPORT THE CONTRACTOR CONTINUES BACKFILL OF THE STORM SEWER TRENCH.

THIS REPORT PRESENTS OPINIONS FORMED AS A RESULT OF OUR OBSERVATION OF FILL PLACEMENT AS WELL AS THE TESTS SHOWN ABOVE. WE HAVE RELIED UPON THE CONTRACTOR TO APPLY THE NECESSARY COMPACTIVE EFFORT AND MOISTURE TO ACHIEVE SPECIFIED COMPACTION DURING TIMES WHEN OUR OBSERVER IS NOT PRESENT, AND AT LOCATIONS OTHER THAN THOSE TESTED. TEST DATA ARE NOT THE SOLE BASIS FOR OPINIONS ON WHETHER THE FILL MEETS SPECIFICATIONS.

() IN OUR OPINION, FILL COMPACTION MEETS SPECIFICATIONS AS INDICATED BY OUR OBSERVATIONS AND TEST NO.(S) 21-23

() IN OUR OPINION, FILL COMPACTION DOES NOT MEET SPECIFICATIONS AS INDICATED BY OUR OBSERVATIONS AND TEST NO.(S)

AND SHOULD BE REWORKED

SCOPE OF OBSERVATION: () FULL TIME; (X) PERIODIC, ON CALL BASIS; (X) CONTRACTOR'S OR CLIENT'S REPRESENTATIVE ADVISED RON/REID-BURTON CONSTRUCTION.

CTL/THOMPSON, INC.

DELMAR FISCHER

FIELD REPRESENTATIVE

APPROVED BY

RONALD M. MC OMBER, P.E.

:PV



CTL/THOMPSON, INC.
CONSULTING GEOTECHNICAL
AND MATERIALS ENGINEERS

1971 WEST 12TH AVE., DENVER, CO 80204
(303) 825-0777

CLIENT: PEPSI-COLA COMPANY OF DENVER
3801 BRIGHTON BOULEVARD
DENVER, COLORADO 80216

DATE: 10-3-85 JOB NO. 12167

REPORT NO. **9** SHEET **1** OF **1**

SUBJECT

ATTN: MR. DON PATTON

PEPSI-COLA PLANT
3801 BRIGHTON BOULEVARD
UTILITY TRENCH BACKFILL

TEST NO.	LOCATION	DEPTH FEET *	TEST TYPE	LABORATORY		FIELD			SOIL TYPE
				MAX DENSITY PCF	OMC %	DRY DENSITY PCF	MC %	COMPACTION %	
24	S.E. CORNER OF FRUCTOSE BUILDING	1.3	NUC	126.5	10.0	123	9.9	97	CURVE #2 JOB #11870
25	S.E. CORNER OF FRUCTOSE BUILDING	0.0	NUC	126.5	10.0	120	8.8	95	" "
*	BELOW GRADE								

SPECIFICATIONS: 95 % OF MAXIMUM ASTM D 1557

MOISTURE WITHIN + 2 % OF OPTIMUM

TYPE OF COMPACTION EQUIPMENT AND NO. OF UNITS:

(2) WHACKER TAMPERS

MOISTURE ADDED BY _____ NATURAL

THICKNESS OF LIFT 10-12 INCHES

TYPE OF EARTH MOVING EQUIPMENT AND NO. OF UNITS:

(1) FRONT LOADER

THIS REPORT PRESENTS OPINIONS FORMED AS A RESULT OF OUR OBSERVATION OF FILL PLACEMENT, AS WELL AS THE TESTS SHOWN ABOVE. WE HAVE RELIED UPON THE CONTRACTOR TO APPLY THE NECESSARY COMPACTIVE EFFORT AND MOISTURE TO ACHIEVE SPECIFIED COMPACTION DURING TIMES WHEN OUR OBSERVER IS NOT PRESENT, AND AT LOCATIONS OTHER THAN THOSE TESTED. TEST DATA ARE NOT THE SOLE BASIS FOR OPINIONS ON WHETHER THE FILL MEETS SPECIFICATIONS.

PROGRESS REPORT THE CONTRACTOR COMPLETED THE BACKFILL OF THE STORM SEWER TRENCH.

☒ IN OUR OPINION, FILL COMPACTION MEETS SPECIFICATIONS AS INDICATED BY OUR OBSERVATIONS AND TEST NO.(S) 24-25

☐ IN OUR OPINION, FILL COMPACTION DOES NOT MEET SPECIFICATIONS AS INDICATED BY OUR OBSERVATIONS AND TEST NO.(S)

AND SHOULD BE REWORKED

SCOPE OF OBSERVATION: ☐ FULL TIME; ☒ PERIODIC, ON CALL BASIS; ☒ CONTRACTOR'S OR CLIENT'S REPRESENTATIVE ADVISED FOREMAN/BELL PLUMBING

CTL/THOMPSON, INC.

DELMAR FISCHER
FIELD REPRESENTATIVE

APPROVED BY

RONALD M. MC OMBER, P.E.

DF:PV



CTL/THOMPSON, INC.
CONSULTING GEOTECHNICAL
AND MATERIALS ENGINEERS

1971 WEST 12TH AVE., DENVER, CO 80204
(303) 825-0777

CLIENT: PEPSI-COLA COMPANY OF DENVER
3801 BRIGHTON BOULEVARD
DENVER, COLORADO 80216

ATTN: MR. DON PATTON

DATE: 10-24-85 JOB. NO. 12167

REPORT NO. 10 SHEET 1 OF 1

SUBJECT

PEPSI-COLA PLANT
3801 BRIGHTON BLVD.
STORM SEWER TRENCH BACKFILL

TEST NO.	LOCATION	DEPTH FEET *	TEST TYPE	LABORATORY		FIELD			SOIL TYPE
				MAX DENSITY PCF	OMC %	DRY DENSITY PCF	MC %	COM-PACTION %	
26	STA. 9+88 45' LEFT	9.0	NUC	122	11.3	105	10.0	86	CURVE #3
	JOB #11870								
27	STA. 9+88 50' LEFT	8.0	NUC	122	11.3	120	8.9	98	" "
	" "								
*	BELOW GRADE								

PECIFICATIONS: 95. % OF MAXIMUM ASTM D 1557

MOISTURE WITHIN _____ + 2 _____ % OF OPTIMUM

TYPE OF COMPACTION EQUIPMENT AND NO. OF UNITS:

(1) FRONT LOADER

MOISTURE ADDED BY _____ NATURAL

THICKNESS OF LIFT _____ INCHES

TYPE OF EARTH MOVING EQUIPMENT AND NO. OF UNITS:

~~_____ (1) FRONT LOADER~~

THIS REPORT PRESENTS OPINIONS FORMED AS A RESULT OF OUR OBSERVATION OF FILL PLACEMENT AS WELL AS THE TESTS SHOWN ABOVE. WE HAVE RELIED UPON THE CONTRACTOR TO APPLY THE NECESSARY COMPACTIVE EFFORT AND MOISTURE TO ACHIEVE SPECIFIED COMPACTION DURING TIMES WHEN OUR OBSERVER IS NOT PRESENT, AND AT LOCATIONS OTHER THAN THOSE TESTED. TEST DATA ARE NOT THE SOLE BASIS FOR OPINIONS ON WHETHER THE FILL MEETS SPECIFICATIONS.

PROGRESS REPORT DURING THIS SITE VISIT THE CONTRACTOR WAS BACKFILLING THE STORM SEWER TRENCH AT STATION 9+88 ON THE RIGHT SIDE OF THE BOX CULVERT.

IN OUR OPINION, FILL COMPACTION MEETS SPECIFICATIONS AS INDICATED BY OUR OBSERVATIONS AND TEST NO.(S) 27

IN OUR OPINION, FILL COMPACTION DOES NOT MEET SPECIFICATIONS AS INDICATED BY OUR OBSERVATIONS AND TEST NO.(S) 26

AND SHOULD BE REWORKED

SCOPE OF OBSERVATION: ☐ FULL TIME; ☒ PERIODIC, ON CALL BASIS; ☒ CONTRACTOR'S OR CLIENT'S REPRESENTATIVE ADVISED RON CARPENTER

CTL/THOMPSON, INC.

DELMAR FISCHER

FIELD REPRESENTATIVE

APPROVED BY

RONALD M. MC OMBER, P.E.

DF:PV



CTL/THOMPSON, INC.
CONSULTING GEOTECHNICAL
AND MATERIALS ENGINEERS

1971 WEST 12TH AVE., DENVER, CO 80204
(303) 825-0777

CLIENT: PEPSI-COLA COMPANY OF DENVER
3801 BRIGHTON BOULEVARD
DENVER, COLORADO 80216

ATTN: MR. DON PATTON

DATE: 10-25-85 JOB NO. 12167
REPORT NO. 11 SHEET 1 OF 1
SUBJECT _____

PEPSI-COLA PLANT
3801 BRIGHTON BLVD.
STORM SEWER TRENCH BACKFILL

TEST NO.	LOCATION	DEPTH FEET *	TEST TYPE	LABORATORY		FIELD			SOIL TYPE
				MAX DENSITY PCF	OMC %	DRY DENSITY PCF	MC %	COMPACTION %	
28	RETEST OF #26		NUC	122	11.3	113	7.4	93	CURVE #3 JOB #11870
29	STA. 9+88. 70' LEFT	8.0	NUC	122	11.3	115	9.0	94	" "
*	BELOW GRADE								

SPECIFICATIONS: 95 % OF MAXIMUM ASTM D 1557
MOISTURE WITHIN + 2 % OF OPTIMUM

TYPE OF COMPACTION EQUIPMENT AND NO. OF UNITS:

(1) VIBRATORY SMOOTH DRUM ROLLER

MOISTURE ADDED BY _____

THICKNESS OF LIFT _____ 12 _____ INCHES

TYPE OF EARTH MOVING EQUIPMENT AND NO. OF UNITS:

(1) FRONT LOADER

THIS REPORT PRESENTS OPINIONS FORMED AS A RESULT OF OUR OBSERVATION OF FILL PLACEMENT, AS WELL AS THE TESTS SHOWN ABOVE. WE HAVE RELIED UPON THE CONTRACTOR TO APPLY THE NECESSARY COMPACTIVE EFFORT AND MOISTURE TO ACHIEVE SPECIFIED COMPACTION DURING TIMES WHEN OUR OBSERVER IS NOT PRESENT AND AT LOCATIONS OTHER THAN THOSE TESTED. TEST DATA ARE NOT THE SOLE BASIS FOR OPINIONS ON WHETHER THE FILL MEETS SPECIFICATIONS.

PROGRESS REPORT THE CONTRACTOR RECOMPACTED THE AREA OF FAILING TEST #26 FROM THE REPORT NO.
#10. THE CONTRACTOR WAS ADVISED TO ADD MOISTURE TO THE SOILS, REWORK AND RECOMPACT
THE CONTRACTOR INDICATED A LARGER ROLLER WOULD BE USED FOR THE COMPACTIVE EFFORT.

☒ IN OUR OPINION, FILL COMPACTION MEETS SPECIFICATIONS AS INDICATED BY OUR OBSERVATIONS AND TEST NO.(S) _____

7. IN OUR OPINION, FILL COMPACTION DOES NOT MEET SPECIFICATIONS AS INDICATED BY OUR OBSERVATIONS AND TEST NO(S) 28, 29

AND SHOULD BE REWORKED

SCOPE OF OBSERVATION: ☐ FULL TIME: ☒ PERIODIC, ON CALL BASIS: ☒ CONTRACTOR'S OR CLIENT'S REPRESENTATIVE ADVISED RON CARPENTER

DELMAR FISCHER

CTI/THOMPSON, INC.

FIELD REPRESENTATIVE

APPROVED BY

RONALD M. MC OMBER, P.E.

:PV



CTL/THOMPSON, INC.
CONSULTING GEOTECHNICAL
AND MATERIALS ENGINEERS

1971 WEST 12TH AVE., DENVER, CO 80204
(303) 825-0777

CLIENT: PEPSI-COLA COMPANY OF DENVER
3801 BRIGHTON BOULEVARD
DENVER, COLORADO 80216

ATTN: MR. DON PATTON

DATE: 10-28-85 JOB. NO. 12167
REPORT NO. 12 SHEET 1 OF 1
SUBJECT _____

SUBJECT

PEPSI-COLA PLANT
3801 BRIGHTON BLVD.
STORM SEWER TRENCH BACKFILL

TEST NO.	LOCATION	DEPTH FEET	TEST TYPE	LABORATORY		FIELD			SOIL TYPE
				MAX DENSITY PCF	OMC %	DRY DENSITY PCF	MC %	COM-PACTION %	
30	RETEST OF #28		NUC	122	11.3	118	11.3	97	CURVE #3 JOB #11870
31	RETEST OF #29		NUC	119*	12.5	115	10.6	97	SAND, SILTY
*	ESTIMATED BY A ONE-POINT								

SPECIFICATIONS: 95 % OF MAXIMUM ASTM D 1557
MOISTURE WITHIN + 2 % OF OPTIMUM

TYPE OF COMPACTION EQUIPMENT AND NO. OF UNITS:

(1) VIBRATORY SHEEPSFOOT ROLLER

MOISTURE ADDED BY (1) WATER TRUCK

THICKNESS OF LIFT 12 INCHES

TYPE OF EARTH MOVING EQUIPMENT AND NO. OF UNITS:

(1) FRONT LOADER

THIS REPORT PRESENTS OPINIONS FORMED AS A RESULT OF OUR OBSERVATION OF FILL PLACEMENT, AS WELL AS THE TESTS SHOWN ABOVE. WE HAVE RELIED UPON THE CONTRACTOR TO APPLY THE NECESSARY COMPACTIVE EFFORT AND MOISTURE TO ACHIEVE SPECIFIED COMPACTION DURING TIMES WHEN OUR OBSERVER IS NOT PRESENT, AND AT LOCATIONS OTHER THAN THOSE TESTED. TEST DATA ARE NOT THE SOLE BASIS FOR OPINIONS ON WHETHER THE FILL MEETS SPECIFICATIONS.

PROGRESS REPORT THE CONTRACTOR RECOMPACTED THE TRENCH BACKFILL PRIOR TO THE RETESTS.

IN OUR OPINION, FILL COMPACTION MEETS SPECIFICATIONS AS INDICATED BY OUR OBSERVATIONS AND TEST NO.(S) 30-31

IN OUR OPINION, FILL COMPACTION DOES NOT MEET SPECIFICATIONS AS INDICATED BY OUR OBSERVATIONS AND TEST NO.(S) _____

AND SHOULD BE REWORKED

SCOPE OF OBSERVATION: ☐ FULL TIME; ☒ PERIODIC, ON CALL BASIS; ☐ CONTRACTOR'S OR CLIENT'S REPRESENTATIVE ADVISED _____

DELMAR FISCHER

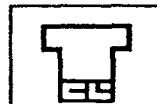
FIELD REPRESENTATIVE

:PV

CTL/THOMPSON, INC.

APPROVED BY

RONALD M. MC OMBER, P.E.



CTL/THOMPSON, INC.
CONSULTING GEOTECHNICAL
AND MATERIALS ENGINEERS

1971 WEST 12TH AVE., DENVER, CO 80204
(303) 825-0777

CLIENT:

PEPSI-COLA COMPANY OF DENVER
3801 BRIGHTON BOULEVARD
DENVER, COLORADO 80216

ATTN: MR. DON PATTON

DATE: 10-29-85 JOB. NO. 12167

REPORT NO. 13 SHEET 1 OF 1

SUBJECT

PEPSI-COLA PLANT
3801 BRIGHTON BLVD.
STORM SEWER TRENCH BACKFILL

TEST NO.	LOCATION	DEPTH FEET *	TEST TYPE	LABORATORY		FIELD			SOIL TYPE
				MAX DENSITY PCF	OMC %	DRY DENSITY PCF	MC %	COM-PACTION %	
32	STATION 9+88, 75' LEFT	3.0	NUC	122.0	11.3	119	9.1	98	CURVE #3
	JOB #11870								
33	STATION 9+88, 95' LEFT	6.0	NUC	126.5	10.0	121	9.8	96	CURVE #2
	JOB #11870								
*	BELOW GRADE								

SPECIFICATIONS: 95 % OF MAXIMUM ASTM D 1557
MOISTURE WITHIN + 2 % OF OPTIMUM

TYPE OF COMPACTION EQUIPMENT AND NO. OF UNITS:

(1) VIBRATORY SHEEPSFOOT ROLLER

MOISTURE ADDED BY . . . NATURAL

THICKNESS OF LIFT 12-16 INCHES

TYPE OF EARTH MOVING EQUIPMENT AND NO. OF UNITS:

(1) FRONT END LOADER

THIS REPORT PRESENTS OPINIONS FORMED AS A RESULT OF OUR OBSERVATION OF FILL PLACEMENT, AS WELL AS THE TESTS SHOWN ABOVE. WE HAVE RELIED UPON THE CONTRACTOR TO APPLY THE NECESSARY COMPACTIVE EFFORT AND MOISTURE TO ACHIEVE SPECIFIED COMPACTION DURING TIMES WHEN OUR OBSERVER IS NOT PRESENT, AND AT LOCATIONS OTHER THAN THOSE TESTED. TEST DATA ARE NOT THE SOLE BASIS FOR OPINIONS ON WHETHER THE FILL MEETS SPECIFICATIONS.

PROGRESS REPORT THE CONTRACTOR CONTINUES TO BACKFILL THE STORM SEWER TRENCH.

IN OUR OPINION, FILL COMPACTION MEETS SPECIFICATIONS AS INDICATED BY OUR OBSERVATIONS AND TEST NO.(S) 32-33

☐ IN OUR OPINION, FILL COMPACTION DOES NOT MEET SPECIFICATIONS AS INDICATED BY OUR OBSERVATIONS AND TEST NO.(S) _____

AND SHOULD BE REWORKED

SCOPE OF OBSERVATION: ☐ FULL TIME; ☒ PERIODIC, ON CALL BASIS; ☒ CONTRACTOR'S OR CLIENT'S REPRESENTATIVE ADVISED _____

CTL/THOMPSON, INC.

DELMAR FISCHER

FIELD REPRESENTATIVE

APPROVED BY

RONALD M. MC OMBER, P.E.

==:PV

Compaction Test Report



CTL/THOMPSON, INC.
CONSULTING GEOTECHNICAL
AND MATERIALS ENGINEERS

1971 WEST 12TH AVE., DENVER, CO 80204
(303) 825-0777

CLIENT: PEPSI-COLA COMPANY OF DENVER
3801 BRIGHTON BOULEVARD
DENVER, COLORADO 80216

ATTN: MR. DON PATTON

DATE: 10-30-85 JOB NO. 12167
REPORT NO. 14 SHEET 1 OF 2
SUBJECT

PEPSI-COLA PLANT
3801 BRIGHTON BLVD.
STORM SEWER TRENCH BACKFILL

TEST NO.	LOCATION	DEPTH FEET *	TEST TYPE	LABORATORY		FIELD			SOIL TYPE
				MAX DENSITY PCF	OMC %	DRY DENSITY PCF	MC %	COMPACTION %	
34	40'E FROM MH #1	9.0	NUC	122	11.3	117	9.4	96	CURVE #3 JOB #11870
35	140'E FROM MH #1	9.0	NUC	122	11.3	116	10.1	95	" "
36	35'E FROM MH #1	7.0	NUC	**119	12.5	113	10.9	95	SAND, SILTY CURVE #3
37	145'E FROM MH #1	6.5	NUC	122	11.3	118	9.9	97	JOB #11870
38	125'E FROM MH #1	5.0	NUC	122	11.3	119	11.6	98	" "
39	80'E FROM MH #1	3.0	NUC	126.5	10.0	121	11.6	96	CURVE #2 JOB #11870
40	175'E FROM MH #1	7.5	NUC	126.5	10.0	120	10.3	95	" "
41	170'E FROM MH #1	5.0	NUC	122	11.3	116	9.5	95	CURVE #3 JOB #11870

* BELOW GRADE ** ESTIMATED BY A ONE-POINT

SPECIFICATIONS: 95 % OF MAXIMUM ASTM D 1557

MOISTURE WITHIN ±2 % OF OPTIMUM

TYPE OF COMPACTION EQUIPMENT AND NO. OF UNITS:

(2) WHACKER TAMPERS

(1) VIBRATORY SHEEPSFOOT ROLLER

MOISTURE ADDED BY (1) WATER TRUCK

THICKNESS OF LIFT 12-16 INCHES

TYPE OF EARTH MOVING EQUIPMENT AND NO. OF UNITS:

(1) FRONT LOADER

THIS REPORT PRESENTS OPINIONS FORMED AS A RESULT OF OUR OBSERVATION OF FILL PLACEMENT, AS WELL AS THE TESTS SHOWN ABOVE. WE HAVE RELIED UPON THE CONTRACTOR TO APPLY THE NECESSARY COMPACTIVE EFFORT AND MOISTURE TO ACHIEVE SPECIFIED COMPACTION DURING TIMES WHEN OUR OBSERVER IS NOT PRESENT, AND AT LOCATIONS OTHER THAN THOSE TESTED. TEST DATA ARE NOT THE SOLE BASIS FOR OPINIONS ON WHETHER THE FILL MEETS SPECIFICATIONS.

PROGRESS REPORT THE CONTRACTORS CONTINUE THE BACKFILL OF STORM SEWER TRENCH ON THE NORTH AND SOUTH SIDES OF THE PROPOSED ATHLETIC COMPLEX.

MANHOLE #1 IS LOCATED NEAR THE NORTH-WEST CORNER OF THE PROPOSED ATHLETIC COMPLEX.

IN OUR OPINION, FILL COMPACTION MEETS SPECIFICATIONS AS INDICATED BY OUR OBSERVATIONS AND TEST NO.(S) 34-41

IN OUR OPINION, FILL COMPACTION DOES NOT MEET SPECIFICATIONS AS INDICATED BY OUR OBSERVATIONS AND TEST NO.(S) AND SHOULD BE REWORKED

SCOPE OF OBSERVATION: ☐ FULL TIME; ☒ PERIODIC, ON CALL BASIS; ☒ CONTRACTOR'S OR CLIENT'S REPRESENTATIVE ADVISED RON/REID-BURTON

CTL/THOMPSON, INC.

DELMAR FISCHER
D REPRESENTATIVE

APPROVED BY

RONALD M. MC OMBER, PE..

IPV

Compaction Test Report



CTL/THOMPSON, INC.
CONSULTING GEOTECHNICAL
AND MATERIALS ENGINEERS

1971 WEST 12TH AVE., DENVER, CO 80204
(303) 825-0777

CLIENT: PEPSI-COLA COMPANY OF DENVER
3801 BRIGHTON BOULEVARD
DENVER, COLORADO 80216

ATTN: MR. DON PATTON

DATE: 10-30-85 JOB. NO. 12167
REPORT NO. 14 SHEET 2 OF 2
SUBJECT

PEPSI-COLA PLANT
3801 BRIGHTON BLVD.
STORM SEWER TRENCH BACKFILL

TEST NO.	LOCATION	DEPTH FEET *	TEST TYPE	LABORATORY		FIELD			SOIL TYPE
				MAX DENSITY PCF **	OMC %	DRY DENSITY PCF	MC %	COM-PACTION %	
42	ROOF STORM DRAIN STA. 10+80 55' RIGHT OF CULVERT CENTER LINE	11.0	NUC	119	12.5	105	10.2	88	SAND, SILTY
43	RETEST OF #42 ROOF STORM DRAIN STA. 10+70 55' RIGHT OF CULVERT CENTER LINE		NUC	119	12.5	113	11.4	95	" "
44		11.0	NUC	119	12.5	114	10.0	96	" "
*	BELOW GRADE								
**	ESTIMATED BY A ONE-POINT								

SPECIFICATIONS: 95 % OF MAXIMUM ASTM D 1557
MOISTURE WITHIN ± 2 % OF OPTIMUM

TYPE OF COMPACTION EQUIPMENT AND NO. OF UNITS:

(2) WHACKER TAMPERS
(1) VIBRATORY SHEEPSFOOT ROLLER

MOISTURE ADDED BY (1) WATER TRUCK

THICKNESS OF LIFT 12-16 INCHES

TYPE OF EARTH MOVING EQUIPMENT AND NO. OF UNITS:

(1) FRONT LOADER

PROGRESS REPORT SEE SHEET 1 OF 2

THIS REPORT PRESENTS OPINIONS FORMED AS A RESULT OF OUR OBSERVATION OF FILL PLACEMENT, AS WELL AS THE TESTS SHOWN ABOVE. WE HAVE RELIED UPON THE CONTRACTOR TO APPLY THE NECESSARY COMPACTIVE EFFORT AND MOISTURE TO ACHIEVE SPECIFIED COMPACTION DURING TIMES WHEN OUR OBSERVER IS NOT PRESENT, AND AT LOCATIONS OTHER THAN THOSE TESTED. TEST DATA ARE NOT THE SOLE BASIS FOR OPINIONS ON WHETHER THE FILL MEETS SPECIFICATIONS.

☒ IN OUR OPINION, FILL COMPACTION MEETS SPECIFICATIONS AS INDICATED BY OUR OBSERVATIONS AND TEST NO.(S) 43 & 44
☐ IN OUR OPINION, FILL COMPACTION DOES NOT MEET SPECIFICATIONS AS INDICATED BY OUR OBSERVATIONS AND TEST NO.(S)

AND SHOULD BE REWORKED

SCOPE OF OBSERVATION: ☐ FULL TIME; ☒ PERIODIC, ON CALL BASIS; ☐ CONTRACTOR'S OR CLIENT'S REPRESENTATIVE ADVISED RON/REID BURTON

CTL/THOMPSON, INC.

DELMAR FISCHER

FIELD REPRESENTATIVE

APPROVED BY

RONALD M. MC OMBER, P.E.

DF:PV

Compaction Test Report



CTL/THOMPSON, INC.
CONSULTING GEOTECHNICAL
AND MATERIALS ENGINEERS

1971 WEST 12TH AVE., DENVER, CO 80204
(303) 825-0777

CLIENT: PEPSI-COLA COMPANY OF DENVER
3801 BRIGHTON BOULEVARD
DENVER, COLORADO 80216

ATTN: MR. DON PATTON

DATE: 10-31-85 JOB NO. 12167
REPORT NO. 15 SHEET 1 OF 1
SUBJECT

PEPSI-COLA PLANT
3801 BRIGHTON BLVD.
STORM SEWER TRENCH BACKFILL

TEST NO.	LOCATION	DEPTH FEET *	TEST TYPE	LABORATORY		FIELD			SOIL TYPE
				MAX DENSITY PCF	OMC %	DRY DENSITY PCF	MC %	COMPACTION %	
45	165' E FROM MH #1	2.0	NUC	126.5	10.0	121	9.0	96	CURVE #2 JOB #11870
46	60' NE FROM EAST INLET	6.0	NUC	120**	10.5	115	6.1	96	SAND SL. SILTY
47	50' NE FROM EAST INLET	4.0	NUC	120**	10.5	114	9.6	95	" "
48	45' NE FROM EAST INLET	2.0	NUC	122	11.3	116	8.7	95	CURVE #3 JOB #11870
*	BELOW GRADE								
**	ESTIMATED BY A ONE-POINT								

SPECIFICATIONS: 95 % OF MAXIMUM ASTM D 1557
MOISTURE WITHIN +2 % OF OPTIMUM

TYPE OF COMPACTION EQUIPMENT AND NO. OF UNITS:

(1) VIBRATORY SHEEPSFOOT ROLLER

MOISTURE ADDED BY NATURAL

THICKNESS OF LIFT 12 INCHES

TYPE OF EARTH MOVING EQUIPMENT AND NO. OF UNITS:

(1) FRONT LOADER

THIS REPORT PRESENTS OPINIONS FORMED AS A RESULT OF OUR OBSERVATION OF FILL PLACEMENT, AS WELL AS THE TESTS SHOWN ABOVE. WE HAVE RELIED UPON THE CONTRACTOR TO APPLY THE NECESSARY COMPACTION EFFORT AND MOISTURE TO ACHIEVE SPECIFIED COMPACTION DURING TIMES WHEN OUR OBSERVER IS NOT PRESENT, AND AT LOCATIONS OTHER THAN THOSE TESTED. TEST DATA ARE NOT THE SOLE BASIS FOR OPINIONS ON WHETHER THE FILL MEETS SPECIFICATIONS.

PROGRESS REPORT THE CONTRACTOR CONTINUES THE BACKFILL OF THE STORM SEWER TRENCH ON THE NORTH SIDE OF THE ATHLETIC COMPLEX.

☒ IN OUR OPINION, FILL COMPACTION MEETS SPECIFICATIONS AS INDICATED BY OUR OBSERVATIONS AND TEST NO.(S) 45-48
☐ IN OUR OPINION, FILL COMPACTION DOES NOT MEET SPECIFICATIONS AS INDICATED BY OUR OBSERVATIONS AND TEST NO.(S)

AND SHOULD BE REWORKED

SCOPE OF OBSERVATION: ☐ FULL TIME; ☒ PERIODIC, ON CALL BASIS; ☒ CONTRACTOR'S OR CLIENT'S REPRESENTATIVE ADVISED RON/REID BURTON

DELMAR FISCHER

FIELD REPRESENTATIVE

CTL/THOMPSON, INC.

APPROVED BY

RONALD M. MC OMBER, P.E.

DF:PV

Compaction Test Report



CTL/THOMPSON, INC.
CONSULTING GEOTECHNICAL
AND MATERIALS ENGINEERS

1971 WEST 12TH AVE., DENVER, CO 80204
(303) 825-0777

CLIENT: PEPSI-COLA COMPANY OF DENVER
3801 BRIGHTON BOULEVARD
DENVER, COLORADO 80216

ATTN: MR. DON PATTON

DATE: 11-1-85 JOB NO. 12167
REPORT NO. 16 SHEET 1 OF 2
SUBJECT

PEPSI-COLA PLANT
3801 BRIGHTON BLVD.
STORM SEWER TRENCH BACKFILL

TEST NO.	LOCATION	DEPTH FEET *	TEST TYPE	LABORATORY		FIELD			SOIL TYPE
				MAX DENSITY PCF	OMC %	DRY DENSITY PCF	MC %	COMPACTION %	
49	SANITARY SEWER 35'S 20'E FROM N.W. CORNER OF THE FRUCTOSE BUILDING	0.0	NUC	122	11.3	118	10.8	98	CURVE #3 JOB #11870
50	ROOF STORM DRAIN STA. 8+50 25' RIGHT FROM CENTER LINE OF THE BOX CULVERT	1.5	NUC	122	11.3	111	10.8	*** 91	" "
51	ROOF STORM DRAIN STA. 8+50 35' RIGHT FROM CENTER LINE OF THE BOX CULVERT	1.7	NUC	122	11.3	113	12.7	*** 93	" "
52	ROOF STORM DRAIN STA. 8+50 10' RIGHT FROM CENTER LINE OF THE BOX CULVERT	0.0	NUC	126.5	10.0	117	9.7	*** 92	CURVE #2 JOB #11870

* BELOW GRADE

SPECIFICATIONS: 95 % OF MAXIMUM ASTM D 1557
MOISTURE WITHIN ± 2 % OF OPTIMUM

TYPE OF COMPACTION EQUIPMENT AND NO. OF UNITS:

(1) VIBRATORY SHEEPSFOOT ROLLER

MOISTURE ADDED BY NATURAL

THICKNESS OF LIFT 12-16 INCHES

TYPE OF EARTH MOVING EQUIPMENT AND NO. OF UNITS:

(1) FRONT END LOADER

THIS REPORT PRESENTS OPINIONS FORMED AS A RESULT OF OUR OBSERVATION OF FILL PLACEMENT, AS WELL AS THE TESTS SHOWN ABOVE. WE HAVE RELIED UPON THE CONTRACTOR TO APPLY THE NECESSARY COMPACTION EFFORT AND MOISTURE TO ACHIEVE SPECIFIED COMPACTION DURING TIMES WHEN OUR OBSERVER IS NOT PRESENT, AND AT LOCATIONS OTHER THAN THOSE TESTED. TEST DATA ARE NOT THE SOLE BASIS FOR OPINIONS ON WHETHER THE FILL MEETS SPECIFICATIONS.

PROGRESS REPORT THE CONTRACTOR CONTINUES THE BACKFILL OF THE STORM SEWER TRENCH.

*** 90% OF MAXIMUM ASTM D 1557

☒ IN OUR OPINION, FILL COMPACTION MEETS SPECIFICATIONS AS INDICATED BY OUR OBSERVATIONS AND TEST NO.(S) 49-52

☐ IN OUR OPINION, FILL COMPACTION DOES NOT MEET SPECIFICATIONS AS INDICATED BY OUR OBSERVATIONS AND TEST NO.(S) _____

AND SHOULD BE REWORKED

SCOPE OF OBSERVATION: ☐ FULL TIME; ☒ PERIODIC, ON CALL BASIS; ☒ CONTRACTOR'S OR CLIENT'S REPRESENTATIVE ADVISED RON/REID BURTON

DELMAR FISCHER

FIELD REPRESENTATIVE

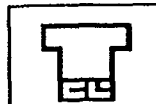
DF:PV

CTL/THOMPSON, INC.

APPROVED BY

RONALD M. MC OMBER, P.E.

Compaction Test Report



CTL/THOMPSON, INC.
CONSULTING GEOTECHNICAL
AND MATERIALS ENGINEERS

1971 WEST 12TH AVE., DENVER, CO 80204
(303) 825-0777

CLIENT: PEPSI-COLA COMPANY OF DENVER
3801 BRIGHTON BOULEVARD
DENVER, COLORADO 80216

ATTN: MR. DON PATTON

DATE: 11-1-85 JOB NO. 12167

REPORT NO. 16 SHEET 2 OF 2

SUBJECT

PEPSI-COLA PLANT
3801 BRIGHTON BLVD.
STORM SEWER TRENCH BACKFILL

TEST NO.	LOCATION	DEPTH FEET *	TEST TYPE	LABORATORY		FIELD			SOIL TYPE
				MAX DENSITY PCF	OMC %	DRY DENSITY PCF	MC %	COMPACTION %	
53	STA. 9+88 15' LEFT FROM THE C.L. OF THE BOX CULVERT	2.5	NUC	119**	12.5	114	13.1	96	SAND, SILTY
54	4'E OF MH #1	7.5	NUC	122	11.3	117	11.5	96	CURVE #3
55	6'E OF MH #1	4.5	NUC	126.5	10.0	120	9.8	95	JOB #11870
56	10'S OF CENTER INLET	6.0	NUC	126.5	10.0	121	10.0	96	CURVE #2
57	15'N OF CENTER INLET	3.5	NUC	126.5	10.0	120	12.5	95	JOB #11870
*	BELOW GRADE								
**	ESTIMATED BY A ONE-POINT								

SPECIFICATIONS: 95 % OF MAXIMUM ASTM D 1557

MOISTURE WITHIN 2 % OF OPTIMUM

TYPE OF COMPACTION EQUIPMENT AND NO. OF UNITS:

(1) VIBRATORY SHEEPSFOOT ROLLER

(1) DOUBLE DRUM VIBRATORY ROLLER

MOISTURE ADDED BY NATURAL

THICKNESS OF LIFT 12 INCHES

TYPE OF EARTH MOVING EQUIPMENT AND NO. OF UNITS:

(1) FRONT LOADER

THIS REPORT PRESENTS OPINIONS FORMED AS A RESULT OF OUR OBSERVATION OF FILL PLACEMENT, AS WELL AS THE TESTS SHOWN ABOVE. WE HAVE RELIED UPON THE CONTRACTOR TO APPLY THE NECESSARY COMPACTIVE EFFORT AND MOISTURE TO ACHIEVE SPECIFIED COMPACTION DURING TIMES WHEN OUR OBSERVER IS NOT PRESENT, AND AT LOCATIONS OTHER THAN THOSE TESTED. TEST DATA ARE NOT THE SOLE BASIS FOR OPINIONS ON WHETHER THE FILL MEETS SPECIFICATIONS.

PROGRESS REPORT SEE SHEET 1 OF REPORT NO. 16.

IN OUR OPINION, FILL COMPACTION MEETS SPECIFICATIONS AS INDICATED BY OUR OBSERVATIONS AND TEST NO.(S) 53-57

IN OUR OPINION, FILL COMPACTION DOES NOT MEET SPECIFICATIONS AS INDICATED BY OUR OBSERVATIONS AND TEST NO.(S)

AND SHOULD BE REWORKED

SCOPE OF OBSERVATION: ☐ FULL TIME; ☒ PERIODIC, ON CALL BASIS; ☒ CONTRACTOR'S OR CLIENT'S REPRESENTATIVE ADVISED RON/REID BURTON

CTL/THOMPSON, INC.

DELMAR FISCHER

FIELD REPRESENTATIVE

APPROVED BY

RONALD M. MC CUMBER, P.E.

F:PV



CTL/THOMPSON, INC.
CONSULTING GEOTECHNICAL
AND MATERIALS ENGINEERS

1971 WEST 12TH AVE., DENVER, CO 80204
(303) 825-0777

CLIENT: PEPSI-COLA COMPANY OF DENVER
3801 BRIGHTON BOULEVARD
DENVER, COLORADO 80216

ATTN: MR. DON PATTON

DATE: 11-12-85 JOB NO. 12167

REPORT NO. 17 SHEET 1 OF 1

SUBJECT

PEPSI-COLA PLANT
3801 BRIGHTON BLVD.
STORM SEWER TRENCH BACKFILL

TEST NO.	LOCATION	DEPTH FEET *	TEST TYPE	LABORATORY		FIELD			SOIL TYPE
				MAX DENSITY PCF	OMC %	DRY DENSITY PCF	MC %	COM-PACTION %	
	50'N OF N.W. CORNER OF								CURVE #3
58	BUILDING	0.8	NUC	122	11.3	112	14.3	92	JOB #11870
	100'N OF N.W. CORNER OF								
59	BUILDING	0.8	NUC	122	11.3	90	10.8	74	" "
	100'W OF CENTER LINE OF								
60	BRIGHTON BLVD.	0.8	NUC	122	11.3	110	10.2	90	" "
	200'W OF CENTER LINE OF								
61	BRIGHTON BLVD.	0.8	NUC	122	11.3	112	11.2	92	" "
*	BELOW GRADE								

SPECIFICATIONS: 95 % OF MAXIMUM ASTM D 1557

MOISTURE WITHIN + 2 % OF OPTIMUM

TYPE OF COMPACTION EQUIPMENT AND NO. OF UNITS:

~~(1) SHEEPSFOOT ROLLER~~

MOISTURE ADDED BY NATURAL

THICKNESS OF LIFT 8-10 INCHES

PE OF EARTH MOVING EQUIPMENT AND NO. OF UNITS:

~~(1) BACKHOE~~

THIS REPORT PRESENTS OPINIONS FORMED AS A RESULT OF OUR OBSERVATION OF FILL PLACEMENT, AS WELL AS THE TESTS SHOWN ABOVE. WE HAVE RELIED UPON THE CONTRACTOR TO APPLY THE NECESSARY COMPACTIVE EFFORT AND MOISTURE TO ACHIEVE SPECIFIED COMPACTION DURING TIMES WHEN OUR OBSERVER IS NOT PRESENT, AND AT LOCATIONS OTHER THAN THOSE TESTED. TEST DATA ARE NOT THE SOLE BASIS FOR OPINIONS ON WHETHER THE FILL MEETS SPECIFICATIONS.

PROGRESS REPORT ACME CONSTRUCTION WAS BACKFILLING THE STORM SEWER TRENCH NORTH OF
THE BUILDING. THE CONTRACTOR WAS ADVISED TO RECOMPACT THE TRENCH BACKFILL.

IN OUR OPINION, FILL COMPACTION MEETS SPECIFICATIONS AS INDICATED BY OUR OBSERVATIONS AND TEST NO. (S) _____

IN OUR OPINION, FILL COMPACTION DOES NOT MEET SPECIFICATIONS AS INDICATED BY OUR OBSERVATIONS AND TEST NO.(S) 58-61

AND SHOULD BE REWORKED

TYPE OF OBSERVATION: ☐ FULL TIME; ☒ PERIODIC, ON CALL BASIS; ☒ CONTRACTOR'S OR CLIENT'S REPRESENTATIVE ADVISED ~~REN (JOB FOREMAN)~~

CTL/THOMPSON, INC.

JAMES N. CARETTO

.D REPRESENTATIVE

APPROVED BY

RONALD M. MC OMBER, P.E.

∴ PV



CTL/THOMPSON, INC.
CONSULTING GEOTECHNICAL
AND MATERIALS ENGINEERS

1971 WEST 12TH AVE., DENVER, CO 80204
(303) 825-0777

CLIENT:

PEPSI COLA COMPANY OF DENVER
3801 BRIGHTON BOULEVARD
DENVER, COLORADO 80216
ATTN: MR. DON PATTON

DATE. 12-02-85 JOB NO. 18 12167
REPORT NO. SHEET 1 OF 1
SUBJECT PEPSI COLA PLANT
3801 BRIGHTON BOULEVARD
SANITARY SEWER TRENCH BACKFILL

[illegible]

SPECIFICATIONS: MOISTURE WITHIN TYPE OF COMPACTION EQUIPMENT AND NO. OF UNITS: MOISTURE ADDED BY THICKNESS OF LIFT TYPE OF EARTH MOVING EQUIPMENT AND NO. OF UNITS:	% OF MAXIMUM % OF OPTIMUM INCHES
--	--

THIS REPORT PRESENTS OPINIONS FORMED AS A RESULT OF OUR OBSERVATION OF FILL PLACEMENT, AS WELL AS THE TESTS SHOWN ABOVE. WE HAVE RELIED UPON THE CONTRACTOR TO APPLY THE NECESSARY COMPACTIVE EFFORT AND MOISTURE TO ACHIEVE SPECIFIED COMPACTION DURING TIMES WHEN OUR OBSERVER IS NOT PRESENT, AND AT LOCATIONS OTHER THAN THOSE TESTED. TEST DATA ARE NOT THE SOLE BASIS FOR OPINIONS ON WHETHER THE FILL MEETS SPECIFICATIONS.

PROGRESS REPORT AS REQUESTED BY RON CARPENTER WE VISITED THE JOB SITE TO INSPECT THE
SANITARY SEWER TRENCH EXTENDING WEST FROM THE SOUTH WEST CORNER OF THE FRUCTOSE
BUILDING. WE OBSERVED SNOW IN THE BOTTOM OF TRENCH WITH APPROXIMATELY 6 INCHES
OF FROST PENETRATION IN THE EXISTING BACKFILL. WE RECOMMENDED BELL PLUMBING REMOVE
FROZEN BACKFILL BEFORE CONTINUING TO PLACE FILL MATERIAL. WE FURTHER RECOMMENDED THE
TRENCH BE PROTECTED FROM FROST WITH BLANKETS IN THE EVENINGS.

IN OUR OPINION, FILL COMPACTION MEETS SPECIFICATIONS AS INDICATED BY OUR OBSERVATIONS AND TEST NO.(S)

IN OUR OPINION, FILL COMPACTION DOES NOT MEET SPECIFICATIONS AS INDICATED BY OUR OBSERVATIONS AND TEST NO.(S)

AND SHOULD BE REWORKED

SCOPE OF OBSERVATION: ; FULL TIME; X PERIODIC, ON CALL BASIS; X CONTRACTOR'S OR CLIENT'S REPRESENTATIVE ADVISED RON CARPENTER

CTL THOMPSON, INC.

JIM CARETTO
FIELD REPRESENTATIVE
JC:RS

APPROVED BY: RONALD M. MC OMBER P.E.

Compaction Test Report



CTL/THOMPSON, INC.
CONSULTING GEOTECHNICAL
AND MATERIALS ENGINEERS

1971 WEST 12TH AVE. DENVER, CO 80204
(303) 825-0777

CLIENT:

PEPSI COLA COMPANY OF DENVER
3801 BRIGHTON BOULEVARD
DENVER, COLORADO 80215
ATTN: MR. DON PATTON

DATE: 12-03-85 JOB NO. 12167
REPORT NO. 19 SHEET 1 OF 1
SUBJECT PEPSI COLA MANUFACTURING FACILITY
3801 BRIGHTON BOULEVARD
WATER MAIN TRENCH BACKFILL

TEST NO.	LOCATION	DEPTH FEET *	TEST TYPE	LABORATORY		FIELD			SOIL TYPE
				MAX DENSITY PCF	OMC %	DRY DENSITY PCF	MC %	COM-PACTATION %	
62	25' WEST OF WATER MAIN METER	0.0	NUC	122	11.3	114	10.5	93	CURVE #3 JOB #11870
63	6' NORTH OF WATER MAIN METER	0.0	NUC	122	11.3	116	13.6	95	
62A	RETEST OF #62		NUC	122	11.3	124	10.0	100	
*	BELOW GRADE								

SPECIFICATIONS: 95 % OF MAXIMUM ASTM D-698
MOISTURE WITHIN ± 2 % OF OPTIMUM

TYPE OF COMPACTION EQUIPMENT AND NO. OF UNITS:
1) VIBRATORY SHEEPSFOOT ROLLER
1) WHACKER TAMPER

MOISTURE ADDED BY NATURAL

THICKNESS OF LIFT 8-10 INCHES

TYPE OF EARTH MOVING EQUIPMENT AND NO. OF UNITS:
1) FRONT END LOADER

THIS REPORT PRESENTS OPINIONS FORMED AS A RESULT OF OUR OBSERVATION OF FILL PLACEMENT, AS WELL AS THE TESTS SHOWN ABOVE. WE HAVE RELIED UPON THE CONTRACTOR TO APPLY THE NECESSARY COMPACTION EFFORT AND MOISTURE TO ACHIEVE SPECIFIED COMPACTION DURING TIMES WHEN OUR OBSERVER IS NOT PRESENT, AND AT LOCATIONS OTHER THAN THOSE TESTED. TEST DATA ARE NOT THE SOLE BASIS FOR OPINIONS ON WHETHER THE FILL MEETS SPECIFICATIONS.

PROGRESS REPORT AT THE TIME OF OUR SITE VISIT ACME CONSTRUCTION COMPLETED PLACING
FILL AROUND THE WATER MAIN METER PROTECTION BOX. THE CONTRACTOR RECOMPACTIONED THE
AREA OF TEST #62 PRIOR TO RETEST.

IN OUR OPINION, FILL COMPACTION MEETS SPECIFICATIONS AS INDICATED BY OUR OBSERVATIONS AND TEST NO.(S) 63, 62A

IN OUR OPINION, FILL COMPACTION DOES NOT MEET SPECIFICATIONS AS INDICATED BY OUR OBSERVATIONS AND TEST NO.(S) 62

AND SHOULD BE REWORKED

SCOPE OF OBSERVATION: ☐ FULL TIME; ☒ PERIODIC, ON CALL BASIS; ☒ CONTRACTOR'S OR CLIENT'S REPRESENTATIVE ADVISED RON CARPENTER

JIM CARETTO
FIELD REPRESENTATIVE
JC:RS

CTL/THOMPSON, INC.

APPROVED BY RONALD M. MC OMBER P.E.



CTL/THOMPSON, INC.
CONSULTING GEOTECHNICAL
AND MATERIALS ENGINEERS

1971 WEST 12TH AVE., DENVER, CO 80204
(303) 825-0777

CLIENT:

PEPSI COLA COMPANY OF DENVER
3801 BRIGHTON BOULEVARD
DENVER, COLORADO 80216
ATTN: MR. DON PATTON

DATE: 12-12-85 JOB NO. 12167

REPORT NO. 20 SHEET 1 OF 1

SUBJECT PEPSI COLA MANUFACTURING FACILITY
3801 BRIGHTON BOULEVARD
SANITARY SEWER TRENCH BACKFILL

TEST NO.	LOCATION	DEPTH FEET *	TEST TYPE	LABORATORY		FIELD			SOIL TYPE
				MAX DENSITY PCF	OMC %	DRY DENSITY PCF	MC %	COM-PACTION %	
64	65' SOUTH OF MH. #7	5.0	NUC	126.5	10.0	110	9.7	87	CURVE #2
	JOB #11870								
65	63' SOUTH OF MH. #7	5.0	NUC	126.5	10.0	94	11.2	74	" "
	" "								
66	120' SOUTH OF MH. #7	5.0	NUC	126.5	10.0	105	11.5	83	" "
	" "								
* BELOW GRADE									

SPECIFICATIONS: 95 % OF MAXIMUM ASTM D-1557

MOISTURE WITHIN +2 % OF OPTIMUM

TYPE OF COMPACTION EQUIPMENT AND NO. OF UNITS:

1) VIBRATORY SHEEPSFOOT ROLLER

MOISTURE ADDED BY NATURAL

THICKNESS OF LIFT _____ INCHES

TYPE OF EARTH MOVING EQUIPMENT AND NO. OF UNITS:

1) FRONT END LOADER

THIS REPORT PRESENTS OPINIONS FORMED AS A RESULT OF OUR OBSERVATION OF FILL PLACEMENT, AS WELL AS THE TESTS SHOWN ABOVE. WE HAVE RELIED UPON THE CONTRACTOR TO APPLY THE NECESSARY COMPACTIVE EFFORT AND MOISTURE TO ACHIEVE SPECIFIED COMPACTION DURING TIMES WHEN OUR OBSERVER IS NOT PRESENT, AND AT LOCATIONS OTHER THAN THOSE TESTED. TEST DATA ARE NOT THE SOLE BASIS FOR OPINIONS ON WHETHER THE FILL MEETS SPECIFICATIONS.

PROGRESS REPORT AS REQUESTED BY DARREL WITH REID BURTON CONSTRUCTION THE ABOVE COMPACTION TESTS WERE PERFORMED ON BACKFILL IN THE SANITARY SEWER TRENCH. DURING THIS VISIT SOIL TEMPERATURES WERE TAKEN IN THE TRENCH BACKFILL AND THE STOCKPILED MATERIAL TEMPERATURES VARIED FROM 24°F TO 28°F. THE DEPTH OF FROST IN THE COMPACTED FILL APPEARED TO BE APPROXIMATELY 12 INCHES.

IN OUR OPINION, FILL COMPACTION MEETS SPECIFICATIONS AS INDICATED BY OUR OBSERVATIONS AND TEST NO.(S) _____

7 IN OUR OPINION, FILL COMPACTION DOES NOT MEET SPECIFICATIONS AS INDICATED BY OUR OBSERVATIONS AND TEST NO.(S) 64-66

AND SHOULD BE REWORKED

COPE OF OBSERVATION: ☐ FULL TIME; ☒ PERIODIC, ON CALL BASIS; ☒ CONTRACTOR'S OR CLIENT'S REPRESENTATIVE ADVISED DARREL (REID BURTON)

CTL/THOMPSON, INC.

DELMAR FISCHER

ELD REPRESENTATIVE
DF:RS

APPROVED BY

RONALD M. MC OMBER P.E.

Compaction Test Report



CTL/THOMPSON, INC.
CONSULTING GEOTECHNICAL
AND MATERIALS ENGINEERS

1971 WEST 12TH AVE., DENVER, CO 80204
(303) 825-0777

CLIENT: PEPSI-COLA COMPANY OF DENVER
3801 BRIGHTON BOULEVARD
DENVER, COLORADO 80216

ATTN: MR. DON PATTON

DATE 12-16-85 JOB NO. 12167
REPORT NO. 21 SHEET 1 OF 1
SUBJECT

PEPSI COLA MANUFACTURING FACILITY
3801 BRIGHTON BOULEVARD
SANITARY SEWER TRENCH BACKFILL

TEST NO.	LOCATION	DEPTH FEET *	TEST TYPE	LABORATORY		FIELD			SOIL TYPE
				MAX DENSITY PCF	OMC %	DRY DENSITY PCF	MC %	COMPACTION %	
64A	RETEST OF #64		NUC	126.5	10.0	116	11.2	92	CURVE #2
65A	RETEST OF #65		NUC	126.5	10.0	112	12.3	89	" "
66A	RETEST OF #66		NUC	126.5	10.0	108	13.3	85	" "

SPECIFICATIONS: 95 % OF MAXIMUM ASTM D 1557
MOISTURE WITHIN ± 2 % OF OPTIMUM

TYPE OF COMPACTION EQUIPMENT AND NO. OF UNITS:

(1) VIBRATORY SHEEPSFOOT ROLLER

MOISTURE ADDED BY NATURAL

THICKNESS OF LIFT INCHES

TYPE OF EARTH MOVING EQUIPMENT AND NO. OF UNITS:

(1) FRONT END LOADER

THIS REPORT PRESENTS OPINIONS FORMED AS A RESULT OF OUR OBSERVATION OF FILL PLACEMENT, AS WELL AS THE TESTS SHOWN ABOVE. WE HAVE RELIED UPON THE CONTRACTOR TO APPLY THE NECESSARY COMPACTIVE EFFORT AND MOISTURE TO ACHIEVE SPECIFIED COMPACTION DURING TIMES WHEN OUR OBSERVER IS NOT PRESENT, AND AT LOCATIONS OTHER THAN THOSE TESTED. TEST DATA ARE NOT THE SOLE BASIS FOR OPINIONS ON WHETHER THE FILL MEETS SPECIFICATIONS.

PROGRESS REPORT PRIOR TO THE ABOVE RETESTS THE CONTRACTOR RECOMPACTED THE EXISTING TRENCH BACKFILL. FROST WAS PRESENT IN THE BACKFILL 8 TO 12 INCHES IN DEPTH. OBSERVATION OF THE STOCKPILED MATERIAL INDICATED FROST AND TEMPERATURES OF 25° TO 27°F. THE CONTRACTOR INDICATED THEY WOULD BEGIN EXCAVATION FOR THE EAST-WEST PORTION OF THE SANITARY SEWER TOMORROW. RON CARPENTER REQUESTED A SITE VISIT TOMORROW 12-17-85. RON INFORMED US THE SPECIFICATION OF 90% OF MAXIMUM ASTM D 1557 SHOWN IN REPORT #2 WAS INCORRECT AND 95% IS REQUIRED DUE TO PAVEMENT IN THIS AREA.

IN OUR OPINION, FILL COMPACTION MEETS SPECIFICATIONS AS INDICATED BY OUR OBSERVATIONS AND TEST NO.(S)

IN OUR OPINION, FILL COMPACTION DOES NOT MEET SPECIFICATIONS AS INDICATED BY OUR OBSERVATIONS AND TEST NO.(S) 64A-66A

AND SHOULD BE REWORKED

SCOPE OF OBSERVATION: ☐ FULL TIME; ☒ PERIODIC, ON CALL BASIS; ☒ CONTRACTOR'S OR CLIENT'S REPRESENTATIVE ADVISED RON/REID BURTON

CTL/THOMPSON, INC.

DELMAR FISCHER

FIELD REPRESENTATIVE

APPROVED BY

RONALD M. MC OMBER, P.E.

RM:PV



CTL/THOMPSON, INC.
CONSULTING GEOTECHNICAL
AND MATERIALS ENGINEERS

1971 WEST 12TH AVE, DENVER, CO 80204
(303) 825-0777

CLIENT: PEPSI-COLA COMPANY OF DENVER
3801 BRIGHTON BOULEVARD
DENVER, COLORADO 80216

ATTN: MR. DON PATTON

DATE: 12-17-85 JOB. NO. 12167

REPORT NO. 22 SHEET 1 OF 1

SUBJECT

PEPSI-COLA MANUFACTURING FACILITY
3801 BRIGHTON BOULEVARD
SANITARY SEWER TRENCH BACKFILL

[illegible]

SPECIFICATIONS:	
	% OF MAXIMUM
MOISTURE WITHIN	% OF OPTIMUM
TYPE OF COMPACTION EQUIPMENT AND NO. OF UNITS:	
MOISTURE ADDED BY	
THICKNESS OF LIFT	INCHES
TYPE OF EARTH MOVING EQUIPMENT AND NO. OF UNITS:	

THIS REPORT PRESENTS OPINIONS FORMED AS A RESULT OF OUR OBSERVATION OF FILL PLACEMENT, AS WELL AS THE TESTS SHOWN ABOVE. WE HAVE RELIED UPON THE CONTRACTOR TO APPLY THE NECESSARY COMPACTIVE EFFORT AND MOISTURE TO ACHIEVE SPECIFIED COMPACTION DURING TIMES WHEN OUR OBSERVER IS NOT PRESENT, AND AT LOCATIONS OTHER THAN THOSE TESTED. TEST DATA ARE NOT THE SOLE BASIS FOR OPINIONS ON WHETHER THE FILL MEETS SPECIFICATIONS.

PROGRESS REPORT AT THE TIME OF THIS VISIT NO WORK WAS IN PROGRESS. THE CONTRACTOR WAS IN THE PROCESS OF STARTING THE EQUIPMENT AND INDICATED HE WOULD BEGIN EXCAVATION FOR THE EAST-WEST PORTION OF THE SANITARY SEWER THIS AFTERNOON. RON CARPENTER REQUESTED WE RETURN TOMORROW 12-18-85.

IN OUR OPINION, FILL COMPACTION MEETS SPECIFICATIONS AS INDICATED BY OUR OBSERVATIONS AND TEST NO.(S) _____

IN OUR OPINION, FILL COMPACTION DOES NOT MEET SPECIFICATIONS AS INDICATED BY OUR OBSERVATIONS AND TEST NO.(S) _____

AND SHOULD BE REWORKED

SCOPE OF OBSERVATION: ☐ FULL TIME; ☒ PERIODIC, ON CALL BASIS; ☒ CONTRACTOR'S OR CLIENT'S REPRESENTATIVE ADVISED RON/REID BURTON

CTL/THOMPSON, INC.

DELMAR FISCHER

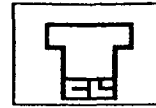
LD REPRESENTATIVE

APPROVED BY

RONALD M. MC OMBER, P.E.

DF : PV

Compaction Test Report



CTL/THOMPSON, INC.
CONSULTING GEOTECHNICAL
AND MATERIALS ENGINEERS
1971 WEST 12TH AVE. DENVER, CO 80204
(303) 825-0777

CLIENT:
PEPSI COLA COMPANY OF DENVER
3801 BRIGHTON BOULEVARD
DENVER, COLORADO 80216
ATTN: MR. DON PATTON

DATE 12-18-85 JOB NO 12167
REPORT NO 23 SHEET 1 OF 1
SUBJECT PEPSI COLA MANUFACTURING FACILITY
3801 BRIGHTON BOULEVARD
SANITARY & STORM SEWER TRENCH BACKFILL

TEST NO.	LOCATION	DEPTH FEET *	TEST TYPE	LABORATORY		FIELD			SOIL TYPE
				MAX DENSITY PCF	OMC %	DRY DENSITY PCF	MC %	COMPACTION %	
67	100' S. OF MH. #7	3.7	NUC	128.5	9.5	122	8.9	95	CURVE #1
68	150' S. OF MH. #7	3.7	NUC	128.5	9.5	124	9.4	96	"
69	120' S. OF MH. #7	3.0	NUC	128.5	9.5	123	9.7	96	"
67A	RETEST OF #67		NUC	128.5	9.5	127	10.6	99	"
68A	RETEST OF #68		NUC	128.5	9.5	129	10.8	100	"
69A	RETEST OF #69		NUC	128.5	9.5	127	10.5	99	"
70	STORM SEWER ROOF DRAIN STA. 4 +00 25' N. OF BUILDING	4.0	NUC	128.5	9.5	125	8.9	97	"
*	BELOW GRADE								

**95% OF MAXIMUM ASTM D-698

SPECIFICATIONS: 98 % OF MAXIMUM ASTM D-698
MOISTURE WITHIN ± 2 % OF OPTIMUM

TYPE OF COMPACTION EQUIPMENT AND NO. OF UNITS
1) VIBRATORY SHEEPSFOOT ROLLER
1) VIBRATORY SMOOTH ROLLER

MOISTURE ADDED BY NATURAL

THICKNESS OF LIFT 12-18 INCHES

TYPE OF EARTH MOVING EQUIPMENT AND NO. OF UNITS

2) FRONT END LOADERS

THIS REPORT PRESENTS OPINIONS FORMED AS A RESULT OF OUR OBSERVATION OF FILL PLACEMENT AS WELL AS THE TESTS SHOWN ABOVE. WE HAVE RELIED UPON THE CONTRACTOR TO APPLY THE NECESSARY COMPACTIVE EFFORT AND MOISTURE TO ACHIEVE SPECIFIED COMPACTION DURING TIMES WHEN OUR OBSERVER IS NOT PRESENT, AND AT LOCATIONS OTHER THAN THOSE TESTED. TEST DATA ARE NOT THE SOLE BASIS FOR OPINIONS ON WHETHER THE FILL MEETS SPECIFICATIONS

PROGRESS REPORT WE VISITED THE SITE TWICE TODAY. DURING THESE VISITS THE CONTRACTOR WAS BACKFILL THE SANITARY SEWER TRENCH BETWEEN MANHOLES 6 AND 7 AND THE STORM SEWER TRENCH AT STATION 4 +00 OF THE BOX CULVERT. THE CONTRACTOR RECOMPACTED THE AREAS OF TEST NUMBERS 67 AND 69 PRIOR TO RETESTS.

IN OUR OPINION, FILL COMPACTION MEETS SPECIFICATIONS AS INDICATED BY OUR OBSERVATIONS AND TEST NO.(S) 67A-69A & 70

IN OUR OPINION, FILL COMPACTION DOES NOT MEET SPECIFICATIONS AS INDICATED BY OUR OBSERVATIONS AND TEST NO.(S)

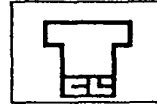
AND SHOULD BE REWORKED

SCOPE OF OBSERVATION: ☐ FULL TIME; ☒ PERIODIC, ON CALL BASIS; ☒ CONTRACTOR'S OR CLIENT'S REPRESENTATIVE ADVISED RON (REID, BURTON)

DELMAR FISCHER
FIELD REPRESENTATIVE
DF:RS

CTL THOMPSON, INC.

Approved By: RONALD M. MC OMBER P.E.



CTL/THOMPSON, INC.
CONSULTING GEOTECHNICAL
AND MATERIALS ENGINEERS

1971 WEST 12TH AVE., DENVER, CO 80204
 (303) 825-0777

CLIENT:

PEPSI COLA COMPANY OF DENVER
3801 BRIGHTON BOULEVARD
DENVER, COLORADO 80216
ATTN: MR. DON PATTON

12-19-85

12167

REPORT NO 24

24

JOE NC)

PAGE 1 OF 1

REF: 50

PEPSI COLA MANUFACTURING FACILITY

SUBJECT

3801 BRIGHTON BOULEVARD

STORM & SANITARY SEWER TRENCH BACKFILL

TEST NO.	LOCATION	DEPTH FEET *	TEST TYPE	LABORATORY		FIELD			SOIL TYPE
				MAX DENSITY PCF	OMC %	DRY DENSITY PCF	MC %	COMPACTION %	
71	80' FROM MH. #7	2.5	NUC	128.5	9.5	130	7.9	100+	CURVE #1
72	75' N. FROM MH. #6	2.0	NUC	126.5	9.5	123	10.4	*** 97	CURVE #2 JOB #11870
73	60' N. FROM MH #6	2.0	NUC	126.5	9.5	123	9.8	*** 97	
74	STA. 4+00 ROOF STORM DRAIN 40' N. OF BUILDING	4.5	NUC	128.5	9.5	123	9.0	** 96	CURVE #1
*	BELOW GRADE								
**	95% OF MAXIMUM ASTM D-698								

*** 95% OF MAXIMUM ASTM D-1557

SPECIFICATIONS: 98 % OF MAXIMUM ASTM D-698
MOISTURE WITHIN ± 2 % OF OPTIMUM

TYPE OF COMPACTION EQUIPMENT AND NO. OF UNITS:

1) VIBRATORY SHEEPSFOOT ROLLER

1) VIBRATORY SMOOTH DRUM ROLLER

MOISTURE ADDED BY NATURAL

 THICKNESS OF LIFT | 12-18 | INCHES |

TYPE OF EARTH MOVING EQUIPMENT AND NO. OF UNITS:

1) FRONT END LOADER

THIS REPORT PRESENTS CONCLUSIONS FORMED AS A RESULT OF OUR OBSERVATION OF FILL PLACEMENT AS WELL AS THE TESTS SHOWN ABOVE. WE HAVE RELIED UPON THE CONTRACTOR TO APPLY THE NECESSARY COMPACTIVE EFFORT AND MOISTURE TO ACHIEVE SPECIFIED COMPACTION DURING TIMES WHEN OUR OBSERVER IS NOT PRESENT, AND AT LOCATIONS OTHER THAN THOSE TESTED. TEST DATA ARE NOT THE SOLE BASIS FOR OPINIONS ON WHETHER THE FILL MEETS SPECIFICATIONS.

PROGRESS REPORT DURING OUR SITE VISIT THE CONTRACTOR WAS BACKFILLING THE SANITARY SEWER TRENCH BETWEEN MANHOLE NUMBERS 6 AND 7 AND THE STORM SEWER TRENCH AT STATION 4+00 OF THE BOX CULVERT.

✓ IN OUR OPINION, FILL COMPACTION MEETS SPECIFICATIONS AS INDICATED BY OUR OBSERVATIONS AND TEST NO.(S) 71-74.

IN OUR OPINION, FILL COMPACTION DOES NOT MEET SPECIFICATIONS AS INDICATED BY OUR OBSERVATIONS AND TEST NO. (S)

AND SHOULD BE REWORKED

SCOPE OF OBSERVATION: FULL TIME: ☒ PERIODIC: ☐ ON CALL BASIS: ☒ CONTRACTOR'S OR CLIENT'S REPRESENTATIVE ADVISED: RON (REID BURTON)

DELMAR FISCHER

1. REPRESENTATIVE
F:RS

CIT. THOMPSON, INC.

APPENDIX

RONALD M. MC OMBER P.E.

Compaction Test Report



CTL/THOMPSON, INC.
CONSULTING GEOTECHNICAL
AND MATERIALS ENGINEERS
1971 WEST 12TH AVE., DENVER, CO 80204
(303) 825-0777

CLIENT:
PEPSI COLA COMPANY OF DENVER
3801 BRIGHTON BOULEVARD
DENVER, COLORADO 80216
ATTN: MR. DON PATTON

DATE 12-21-85 JOB NO. 12167
REPORT NO. 25 SHEET 1 OF 1
SUBJECT PEPSI COLA MANUFACTURING FACILITY
3801 BRIGHTON BOULEVARD
SANITARY SEWER TRENCH BACKFILL

TEST NO.	LOCATION	DEPTH FEET	TEST TYPE	LABORATORY		FIELD			SOIL TYPE
				MAX DENSITY PCF	OMC %	DRY DENSITY PCF	MC %	COMPACTION %	

SPECIFICATIONS: OF MAXIMUM
MOISTURE WITHIN OF OPTIMUM
TYPE OF COMPACTION EQUIPMENT AND NO. OF UNITS
MOISTURE ADDED BY
THICKNESS OF LIFT INCHES
TYPE OF EARTH MOVING EQUIPMENT AND NO. OF UNITS

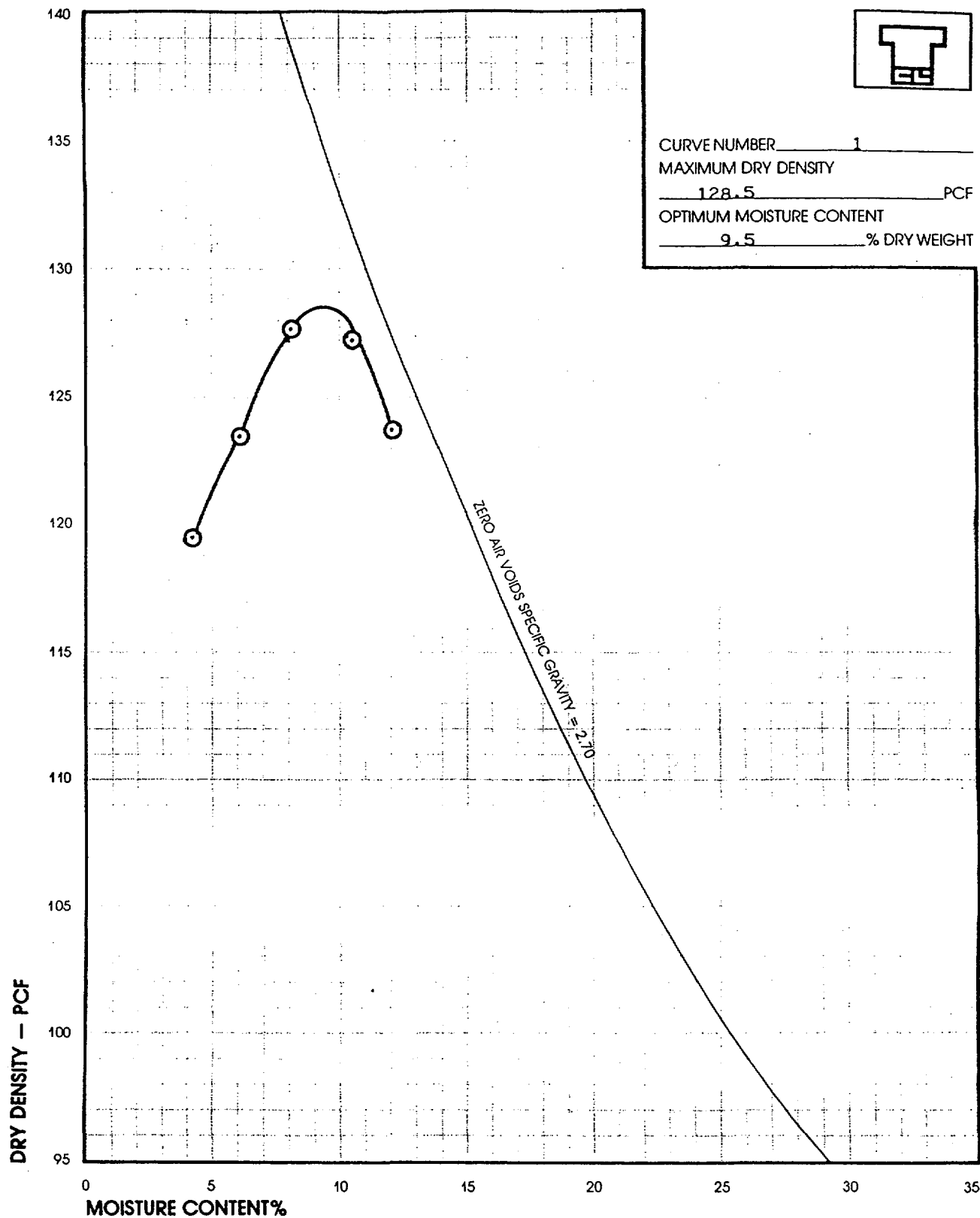
THIS REPORT PRESENTS OPINIONS FORMED AS A RESULT OF OUR OBSERVATION OF FILL PLACEMENT AS WELL AS THE TESTS SHOWN ABOVE. WE HAVE RELIED UPON THE CONTRACTOR TO APPLY THE NECESSARY COMPACTION EFFORT AND MOISTURE TO ACHIEVE SPECIFIED COMPACTION DURING TIMES WHEN OUR OBSERVER IS NOT PRESENT, AND AT LOCATIONS OTHER THAN THOSE TESTED. TEST DATA ARE NOT THE SOLE BASIS FOR OPINIONS ON WHETHER THE FILL MEETS SPECIFICATIONS

PROGRESS REPORT DURING OUR SITE VISIT THE CONTRACTOR INFORMED US THAT NO TRENCH BACKFILL WOULD BE PERFORMED DUE TO NO PERSONNEL AVAILABLE. THE CONTRACTOR WAS EXCAVATING AND PLACING STORM SEWER PIPE BETWEEN MANHOLE NUMBERS 5 AND 6.

IN OUR OPINION, FILL COMPACTION MEETS SPECIFICATIONS AS INDICATED BY OUR OBSERVATIONS AND TEST NO.(S)
IN OUR OPINION, FILL COMPACTION DOES NOT MEET SPECIFICATIONS AS INDICATED BY OUR OBSERVATIONS AND TEST NO.(S)
AND SHOULD BE REWORKED
SCOPE OF OBSERVATION: ☐ FULL TIME; ☒ PERIODIC, ON CALL BASIS; ☒ CONTRACTOR'S OR CLIENT'S REPRESENTATIVE ADVISED FOREMAN (ACME EXCAVATING)

ELMAR FISCHER
D REPRESENTATIVE
F:RS

CTL/THOMPSON, INC.
APPROVED BY
RONALD M. MC OMBER P.E.



Sample Description SAND-GRAVEL, CLAYEY

RED-BROWN

Location IMPORT TO PEPSI COLA FROM MOBIL

PREMIX

Compaction Test Procedure ASTM D-698-78

METHOD 'C'

LIQUID LIMIT _____ %

PLASTICITY INDEX _____ %

GRAVEL _____ %

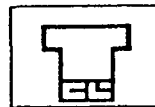
SAND _____ %

SILT AND CLAY _____ %

JOB NO. 12167

**Compaction
Test Results**

Compaction Test Report



CTL/THOMPSON, INC.
CONSULTING GEOTECHNICAL
AND MATERIALS ENGINEERS

1971 WEST 12TH AVE., DENVER, CO 80204
(303) 825-0777

CLIENT: PEPSI-COLA COMPANY OF DENVER
3801 BRIGHTON BOULEVARD
DENVER, COLORADO 80216

ATTN: MR. DON PATTON

DATE: 12-23-85 JOB NO. 12167
REPORT NO. 26 SHEET 1 OF 1
SUBJECT

PEPSI COLA MANUFACTURING FACILITY
3801 BRIGHTON BOULEVARD
SANITARY SEWER TRENCH BACKFILL

TEST NO.	LOCATION	DEPTH FEET *	TEST TYPE	LABORATORY		FIELD			SOIL TYPE
				MAX DENSITY PCF	OMC %	DRY DENSITY PCF	MC %	COMPACTION %	
75	80' W FROM MH #5	4.5	NUC	122	11.3	116	10.5	95	CURVE #3 JOB #11870
76	120' W FROM MH #5	4.5	NUC	122	11.3	120	10.9	98	
*	BELOW GRADE								

SPECIFICATIONS: 95 % OF MAXIMUM ASTM D 1557

MOISTURE WITHIN ± 2 % OF OPTIMUM

TYPE OF COMPACTION EQUIPMENT AND NO. OF UNITS:

(1) VIBRATORY SHEEPSFOOT ROLLER

MOISTURE ADDED BY NATURAL

THICKNESS OF LIFT 12-18 INCHES

TYPE OF EARTH MOVING EQUIPMENT AND NO. OF UNITS:

(1) FRONT END LOADER

THIS REPORT PRESENTS OPINIONS FORMED AS A RESULT OF OUR OBSERVATION OF FILL PLACEMENT AS WELL AS THE TESTS SHOWN ABOVE. WE HAVE RELIED UPON THE CONTRACTOR TO APPLY THE NECESSARY COMPACTION EFFORT AND MOISTURE TO ACHIEVE SPECIFIED COMPACTION DURING TIMES WHEN OUR OBSERVER IS NOT PRESENT, AND AT LOCATIONS OTHER THAN THOSE TESTED. TEST DATA ARE NOT THE SOLE BASIS FOR OPINIONS ON WHETHER THE FILL MEETS SPECIFICATIONS.

PROGRESS REPORT DURING THIS SITE VISIT, THE CONTRACTOR WAS BACKFILLING THE
SANITARY SEWER TRENCH BETWEEN MANHOLES #4 AND #5.

☒ IN OUR OPINION, FILL COMPACTION MEETS SPECIFICATIONS AS INDICATED BY OUR OBSERVATIONS AND TEST NO.(S) 75, 76

☐ IN OUR OPINION, FILL COMPACTION DOES NOT MEET SPECIFICATIONS AS INDICATED BY OUR OBSERVATIONS AND TEST NO.(S)

AND SHOULD BE REWORKED

SCOPE OF OBSERVATION: ☐ FULL TIME; ☒ PERIODIC, ON CALL BASIS; ☒ CONTRACTOR'S OR CLIENT'S REPRESENTATIVE ADVISED FOREMAN/ACME

DELMAR FISCHER

FIELD REPRESENTATIVE

DF:PV

CTL/THOMPSON, INC.

APPROVED BY

RONALD M. MC OMBER, P.E.



CTL/THOMPSON, INC.
CONSULTING GEOTECHNICAL
AND MATERIALS ENGINEERS

1971 WEST 12TH AVE., DENVER, CO 80204
(303) 825-0777

CLIENT:
PEPSI COLA COMPANY OF DENVER
3801 BRIGHTON BOULEVARD
DENVER, COLORADO 80216
ATTN: MR. DON PATTON

DATE 12-27-85 JOB NO. 12167
REPORT NO. 27 SHEET 1 OF 1
SUBJECT PEPSI COLA MANUFACTURING FACILITY
3801 BRIGHTON BOULEVARD
SANITARY SEWER TRENCH BACKFILL

TEST NO.	LOCATION	DEPTH FEET *	TEST TYPE	LABORATORY		FIELD			SOIL TYPE
				MAX DENSITY PCF	OMC %	DRY DENSITY PCF	MC %	COM-PACTION %	
77	70' W. OF MH #5	0.0	NUC	122	11.0	116	10.2	95	CURVE #3 JOB #11870
78	170' W. OF MH #5	0.0	NUC	122	11.0	116	10.3	95	
*	BELOW GRADE								

SPECIFICATIONS: 95 % OF MAXIMUM ASTM D-1557
MOISTURE WITHIN ± 2 % OF OPTIMUM

TYPE OF COMPACTION EQUIPMENT AND NO. OF UNITS:
1) VIBRATORY SHEEPSFOOT ROLLER

MOISTURE ADDED BY NATURAL

THICKNESS OF LIFT 18 INCHES

TYPE OF EARTH MOVING EQUIPMENT AND NO. OF UNITS:

1)LOADER

THIS REPORT PRESENTS OPINIONS FORMED AS A RESULT OF OUR OBSERVATION OF FILL PLACEMENT, AS WELL AS THE TESTS SHOWN ABOVE. WE HAVE RELIED UPON THE CONTRACTOR TO APPLY THE NECESSARY COMPACTIVE EFFORT AND MOISTURE TO ACHIEVE SPECIFIED COMPACTION DURING TIMES WHEN OUR OBSERVER IS NOT PRESENT, AND AT LOCATIONS OTHER THAN THOSE TESTED. TEST DATA ARE NOT THE SOLE BASIS FOR OPINIONS ON WHETHER THE FILL MEETS SPECIFICATIONS.

PROGRESS REPORT DURING THIS VISIT THE CONTRACTOR WAS PREPARING TO BACKFILL THE SANITARY SEWER TRENCH BETWEEN MAN HOLE 5 AND 6.

☒ IN OUR OPINION, FILL COMPACTION MEETS SPECIFICATIONS AS INDICATED BY OUR OBSERVATIONS AND TEST NO. (S) 77, 78

IN OUR OPINION, FILL COMPACTION DOES NOT MEET SPECIFICATIONS AS INDICATED BY OUR OBSERVATIONS AND TEST NO.(S)

AND SHOULD BE REWORKED

SCOPE OF OBSERVATION: ☐ FULL TIME; ☒ PERIODIC, ON CALL BASIS; ☒ CONTRACTOR'S OR CLIENT'S REPRESENTATIVE ADVISED **ACME EXCAVATING**

DELMAR FISCHER

FIELD REPRESENTATIVE
DF:RS

CTL/THOMPSON, INC.

APPROVED BY

RONALD M. MC OMBER P.E.

Compaction Test Report



CTL/THOMPSON, INC.
CONSULTING GEOTECHNICAL
AND MATERIALS ENGINEERS

1971 WEST 12TH AVE. DENVER, CO 80204
(303) 825-0777

CLIENT:

PEPSI COLA COMPANY OF DENVER
3801 BRIGHTON BOULEVARD
DENVER, COLORADO 80216
ATTN: MR. DON PATTON

DATE: 12-30-85 JOB NO. 12167

REPORT NO. 28 SHEET 1 OF 1

SUBJECT PEPSI COLA MANUFACTURING FACILITY
3801 BRIGHTON BOULEVARD
SANITARY SEWER & GAS TRENCH BACKFILL

TEST NO.	LOCATION	DEPTH FEET	TEST TYPE	LABORATORY		FIELD			SOIL TYPE
				MAX DENSITY PCF	OMC %	DRY DENSITY PCF	MC %	COMPACTION %	
79	5' S. OF MH #5	6.0	NUC	126.5	10.0	123	11.4	97	CURVE #2 JOB #11870
80	25' E. OF MH #5	7.5	NUC	126.5	10.0	115	12.1	91	" "
81	GASLINE TRENCH 25' N. & 20' W. FROM N.W. CORNER OF THE FRUCTOSE BUILDING	0.0	NUC	130	7.5	112	8.7	86	CURVE #1 JOB #11870
*	BELOW GRADE								
**	90% OF MAXIMUM ASTM D-1557 IS REQUIRED IN THIS AREA								

SPECIFICATIONS: 95 % OF MAXIMUM ASTM D-1557

MOISTURE WITHIN ±2 % OF OPTIMUM

TYPE OF COMPACTION EQUIPMENT AND NO. OF UNITS:

1) VIBRATORY SHEEPSFOOT ROLLER

MOISTURE ADDED BY NATURAL

THICKNESS OF LIFT 18 INCHES

TYPE OF EARTH MOVING EQUIPMENT AND NO. OF UNITS:

1) FRONT LOADER

THIS REPORT PRESENTS OPINIONS FORMED AS A RESULT OF OUR OBSERVATION OF FILL PLACEMENT, AS WELL AS THE TESTS SHOWN ABOVE. WE HAVE RELIED UPON THE CONTRACTOR TO APPLY THE NECESSARY COMPACTION EFFORT AND MOISTURE TO ACHIEVE SPECIFIED COMPACTION DURING TIMES WHEN OUR OBSERVER IS NOT PRESENT, AND AT LOCATIONS OTHER THAN THOSE TESTED. TEST DATA ARE NOT THE SOLE BASIS FOR OPINIONS ON WHETHER THE FILL MEETS SPECIFICATIONS.

PROGRESS REPORT DURING THIS SITE VISIT THE CONTRACTOR WAS BACKFILLING THE SANITARY SEWER TRENCH BETWEEN MAN HOLES 5 AND 6. STEVE WITH REID BURTON REQUESTED A TEST BE PERFORMED ON THE BACKFILL IN THE GAS LINE TRENCH LOCATED NORTH WEST OF THE FRUCTOSE BUILDING. STEVE INDICATED RECOMPACTION OF THIS TRENCH BACKFILL WOULD BE DONE THIS SPRING.

☐ IN OUR OPINION, FILL COMPACTION MEETS SPECIFICATIONS AS INDICATED BY OUR OBSERVATIONS AND TEST NO.(S) 79, 80

☒ IN OUR OPINION, FILL COMPACTION DOES NOT MEET SPECIFICATIONS AS INDICATED BY OUR OBSERVATIONS AND TEST NO.(S) 81

AND SHOULD BE REWORKED

LOADER OPERATOR (ACME)

SCOPE OF OBSERVATION: ☐ FULL TIME; ☒ PERIODIC, ON CALL BASIS; ☒ CONTRACTOR'S OR CLIENT'S REPRESENTATIVE ADVISED STEVE (REID BURTON)

DELMAR FISCHER

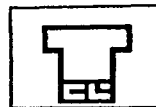
FIELD REPRESENTATIVE
DF:RS

CTL/THOMPSON, INC.

APPROVED BY

RONALD M. MC OMBER P.E.

Compaction Test Report



CTL/THOMPSON, INC.
CONSULTING GEOTECHNICAL
AND MATERIALS ENGINEERS

1971 WEST 12TH AVE., DENVER, CO 80204
(303) 825-0777

CLIENT: PEPSI-COLA COMPANY OF DENVER
3801 BRIGHTON BOULEVARD
DENVER, COLORADO 80216

ATTN: MR. DON PATTON

DATE: 1-2-85 JOB NO. 12167
REPORT NO. 29 SHEET 1 OF 1
SUBJECT

PEPSI COLA MANUFACTURING FACILITY
3801 BRIGHTON BOULEVARD
SANITARY SEWER TRENCH BACKFILL

TEST NO.	LOCATION	DEPTH FEET *	TEST TYPE	LABORATORY		FIELD			SOIL TYPE
				MAX DENSITY PCF	OMC %	DRY DENSITY PCF	MC %	COMPACTION %	
82	35'E FROM MH #5	4.0	NUC	126.5	10.0	115	10.3	91	CURVE #2 JOB #11870
83	25'W FROM MH #6	1.5	NUC	126.5	10.0	117	10.4	92	" "
84	20'E FROM MH #5	3.0	NUC	126.5	10.0	120	11.0	95	" "
85	50'W FROM MH #4	4.5	NUC	126.5	10.0	115	10.3	91	" "

SPECIFICATIONS: 90 % OF MAXIMUM ASTM D 1557

MOISTURE WITHIN ± 2 % OF OPTIMUM

TYPE OF COMPACTION EQUIPMENT AND NO. OF UNITS:

(1) VIBRATORY SHEEPSFOOT

MOISTURE ADDED BY NATURAL

THICKNESS OF LIFT 12-18 INCHES

TYPE OF EARTH MOVING EQUIPMENT AND NO. OF UNITS:

(1) FRONT LOADER

THIS REPORT PRESENTS OPINIONS FORMED AS A RESULT OF OUR OBSERVATION OF FILL PLACEMENT, AS WELL AS THE TESTS SHOWN ABOVE. WE HAVE RELIED UPON THE CONTRACTOR TO APPLY THE NECESSARY COMPACTIVE EFFORT AND MOISTURE TO ACHIEVE SPECIFIED COMPACTION DURING TIMES WHEN OUR OBSERVER IS NOT PRESENT, AND AT LOCATIONS OTHER THAN THOSE TESTED. TEST DATA ARE NOT THE SOLE BASIS FOR OPINIONS ON WHETHER THE FILL MEETS SPECIFICATIONS.

PROGRESS REPORT THE CONTRACTOR CONTINUES TO THE BACKFILL OF THE SANITARY SEWER. MANHOLE NUMBERS 4 AND 6 ARE NOT BEING BACKFILLED AT THIS TIME.

IN OUR OPINION, FILL COMPACTION MEETS SPECIFICATIONS AS INDICATED BY OUR OBSERVATIONS AND TEST NO.(S) 82-85

IN OUR OPINION, FILL COMPACTION DOES NOT MEET SPECIFICATIONS AS INDICATED BY OUR OBSERVATIONS AND TEST NO.(S)

AND SHOULD BE REWORKED

SCOPE OF OBSERVATION: ☐ FULL TIME; ☒ PERIODIC, ON CALL BASIS; ☒ CONTRACTOR'S OR CLIENT'S REPRESENTATIVE ADVISED LOADER OPERATOR
ACME EXCAVATING

CTL/THOMPSON, INC.

FIELD REPRESENTATIVE DELMAR FISCHER

APPROVED BY

RONALD M. MC OMBER, P.E.

JF:PV



CTL/THOMPSON, INC.
CONSULTING GEOTECHNICAL
AND MATERIALS ENGINEERS

1971 WEST 12TH AVE., DENVER, CO 80204
(303) 825-0777

CLIENT:

PEPSI COLA COMPANY OF DENVER
3801 BRIGHTON BOULEVARD
DENVER, COLORADO 80216
ATTN: MR. DON PATTON

DATE: 01-03-86 JOB NO. 12167
REPORT NO. 30 SHEET 1 OF 1
SUBJECT PEPSI COLA MANUFACTURING FACILITY
3801 BRIGHTON BOULEVARD
SANITARY SEWER TRENCH BACKFILL

TEST NO.	LOCATION	DEPTH FEET *	TEST TYPE	LABORATORY		FIELD			SOIL TYPE
				MAX DENSITY PCF	OMC %	DRY DENSITY PCF	MC %	COM-PACTION %	
86	100' W. FROM MH. 4	0.0	NUC	126.5	10.0	106	12.2	84	CURVE #2 JOB #11870
87	40' E. FROM MH. 3	0.0	NUC	126.5	10.0	114	10.7	90	
*	BELOW GRADE								

SPECIFICATIONS: 90 PERCENT OF MAXIMUM ASTM D- 1557
MOISTURE WITHIN +2 PERCENT OF OPTIMUM
TYPE OF COMPACTION EQUIPMENT AND NO. OF UNITS
1) VIBRATORY SHEEPSFOOT ROLLER

MOISTURE ADDED BY NATURAL

ICKNESS OF LIFT

TYPE OF EARTH MOVING EQUIPMENT AND NO. OF UNITS

1) FRONT LOADER

THIS REPORT PRESENTS OPINIONS FORMED AS A RESULT OF OUR OBSERVATION OF FILL PLACEMENT AS WELL AS THE TESTS SHOWN ABOVE. WE HAVE RELIED UPON THE CONTRACTOR TO APPLY THE NECESSARY COMPACTIVE EFFORT AND MOISTURE TO ACHIEVE SPECIFIED COMPACTION DURING TIMES WHEN OUR OBSERVER IS NOT PRESENT, AND AT LOCATIONS OTHER THAN THOSE TESTED. TEST DATA ARE NOT THE SOLE BASIS FOR OPINIONS ON WHETHER THE FILL MEETS SPECIFICATIONS.

PROGRESS REPORT PRIOR TO THIS VISIT THE CONTRACTOR COMPLETED THE TRENCH BACKFILL BETWEEN MANHOLE NUMBERS 3 AND 4. SOIL TEMPERATURES AT THE TEST LOCATIONS VARIED FROM 25° TO 28° F.

IN OUR OPINION, FILL COMPACTION MEETS SPECIFICATIONS AS INDICATED BY OUR OBSERVATIONS AND TEST NO.(S) 87

IN OUR OPINION, FILL COMPACTION DOES NOT MEET SPECIFICATIONS AS INDICATED BY OUR OBSERVATIONS AND TEST NO.(S) 86..

AND SHOULD BE REWORKED

TYPE OF OBSERVATION: ☐ FULL TIME; ☒ PERIODIC, ON CALL BASIS; ☒ CONTRACTOR'S OR CLIENT'S REPRESENTATIVE ADVISED **LOADER OPERATOR**
(ACME EXCAVATING)

CTL THOMPSON, INC.

ELMAR FISCHER
O REPRESENTATIVE
FIRS

APPROVED BY: RONALD M. MC OMBER P.E.

Compaction Test Report



CTL/THOMPSON, INC.
CONSULTING GEOTECHNICAL
AND MATERIALS ENGINEERS

1971 WEST 12TH AVE., DENVER, CO 80204
(303) 825-0777

CLIENT:
PEPSI COLA COMPANY OF DENVER
3801 BRIGHTON BOULEVARD
DENVER, COLORADO 80216
ATTN: MR. DON PATTON

DATE: 01-06-86 JOB NO. 12167
REPORT NO. 31 SHEET 1 OF 1
SUBJECT: PEPSI COLA MANUFACTURING FACILITY
3801 BRIGHTON BOULEVARD
SANITARY SEWER TRENCH BACKFILL

TEST NO.	LOCATION	DEPTH FEET	TEST TYPE	LABORATORY		FIELD			SOIL TYPE
				MAX DENSITY PCF	OMC %	DRY DENSITY PCF	MC %	COM-PACTION %	
86A	RETEST OF #86		NUC	126.5	10.0	114	10.8	90	CURVE #2 JOB #11870

SPECIFICATIONS: 90 OF MAXIMUM ASTM D-1557
MOISTURE WITHIN ± 2 OF OPTIMUM

E OF COMPACTION EQUIPMENT AND NO. OF UNITS:
() VIBRATORY SHEEPSFOOT ROLLER

MOISTURE ADDED BY NATURAL

THICKNESS OF LIFT INCHES

E OF EARTH MOVING EQUIPMENT AND NO. OF UNITS

() FRONT LOADER

THIS REPORT PRESENTS OPINIONS FORMED AS A RESULT OF OUR OBSERVATION OF FILL PLACEMENT AS WELL AS THE TESTS SHOWN ABOVE. WE HAVE RELIED UPON THE CONTRACTOR TO APPLY THE NECESSARY COMPACTIVE EFFORT AND MOISTURE TO ACHIEVE SPECIFIED COMPACTION DURING TIMES WHEN OUR OBSERVER IS NOT PRESENT AND AT LOCATIONS OTHER THAN THOSE TESTED. TEST DATA ARE NOT THE SOLE BASIS FOR OPINIONS ON WHETHER THE FILL MEETS SPECIFICATIONS.

PROGRESS REPORT PRIOR TO THE ABOVE RETEST THE CONTRACTOR RE-COMPACTED THE TRENCH BACKFILL BETWEEN MANHOLE NUMBERS 3 AND 4. THE CONTRACTOR HAS NOT BACKFILLED OR COMPACTED ANY ADDITIONAL TRENCH SINCE THE PREVIOUS VISIT.

IN OUR OPINION, FILL COMPACTION MEETS SPECIFICATIONS AS INDICATED BY OUR OBSERVATIONS AND TEST NO.(S) 86A

IN OUR OPINION, FILL COMPACTION DOES NOT MEET SPECIFICATIONS AS INDICATED BY OUR OBSERVATIONS AND TEST NO.(S)

AND SHOULD BE REWORKED

TYPE OF OBSERVATION: ☐ FULL TIME; ☒ PERIODIC, ON CALL BASIS; ☒ CONTRACTOR'S OR CLIENT'S REPRESENTATIVE ADVISED LOADER OPERATOR
(ACME EXCAVATING)

CTL/THOMPSON, INC.

ELMAR FISCHER
REPRESENTATIVE
F:RS

APPROVED BY RONALD M. MC OMBER P.E.



CTL/THOMPSON, INC.
CONSULTING GEOTECHNICAL
AND MATERIALS ENGINEERS

1971 WEST 12TH AVE., DENVER, CO 80204
(303) 825-0777

CLIENT:

PEPSI COLA COMPANY OF DENVER
3801 BRIGHTON BOULEVARD
DENVER, COLORADO 80216
ATTN: MR. DON PATTON

DATE: 01-09-86 JOB. NO. 12167
REPORT NO. 32 SHEET 1 OF 1
SUBJECT PEPSI COLA MANUFACTURING FACILITY
3801 BRIGHTON BOULEVARD
SANITARY SEWER TRENCH BACKFILL

TEST NO.	LOCATION	DEPTH FEET *	TEST TYPE	LABORATORY		FIELD			SOIL TYPE
				MAX DENSITY PCF **	OMC %	DRY DENSITY PCF	MC %	COM-PACTION %	
88	40' E OF MH. #1	3.0	NUC	119	12.5	109	13.9	92	CLAY V. SANDY
88A	RETEST OF #88		NUC	119	12.5	115	12.9	97	" "
* **	BELOW GRADE ESTIMATED BY A ONE-POINT PROCTOR								

SPECIFICATIONS: 95 % OF MAXIMUM ASTM D-698

MOISTURE WITHIN +2 % OF OPTIMUM

TYPE OF COMPACTION EQUIPMENT AND NO. OF UNITS:

1)WALK BEHIND VIBRATORY SHEEPSFOOT ROLLER

MOISTURE ADDED BY NATURAL

THICKNESS OF LIFT 10-12 INCHES

TYPE OF EARTH MOVING EQUIPMENT AND NO. OF UNITS:

1)LOADER

THIS REPORT PRESENTS OPINIONS FORMED AS A RESULT OF OUR OBSERVATION OF FILL PLACEMENT, AS WELL AS THE TESTS SHOWN ABOVE. WE HAVE RELIED UPON THE CONTRACTOR TO APPLY THE NECESSARY COMPACTIVE EFFORT AND MOISTURE TO ACHIEVE SPECIFIED COMPACTION DURING TIMES WHEN OUR OBSERVER IS NOT PRESENT, AND AT LOCATIONS OTHER THAN THOSE TESTED. TEST DATA ARE NOT THE SOLE BASIS FOR OPINIONS ON WHETHER THE FILL MEETS SPECIFICATIONS.

PROGRESS REPORT DURING THIS SITE VISIT THE CONTRACTOR WAS BACKFILLING THE SANITARY SEWER TRENCH BETWEEN MANHOLES 1 AND 2. DON PATTON WITH PEPSI COLA INDICATED 95% OF THE MAXIMUM DRY DENSITY DETERMINED BY A STANDARD PROCTOR (ASTM D-698) WOULD BE SATISFACTORY FOR THIS PORTION OF TRENCH LOCATED ON ARKIN STREET.

☒ IN OUR OPINION, FILL COMPACTION MEETS SPECIFICATIONS AS INDICATED BY OUR OBSERVATIONS AND TEST NO.(S) 88A

☐ IN OUR OPINION, FILL COMPACTION DOES NOT MEET SPECIFICATIONS AS INDICATED BY OUR OBSERVATIONS AND TEST NO.(S)

AND SHOULD BE REWORKED

SCOPE OF OBSERVATION: ☐ FULL TIME; ☒ PERIODIC, ON CALL BASIS; ☒ CONTRACTOR'S OR CLIENT'S REPRESENTATIVE ADVISED MARK (ACME EXCAVATING)

CTL/THOMPSON, INC.

DELMAR FISCHER/KIRK STEADMAN
FIELD REPRESENTATIVE
DF/KS:RS

APPROVED BY

RONALD M. MC OMBER P.E.



CTL/THOMPSON, INC.
CONSULTING GEOTECHNICAL
AND MATERIALS ENGINEERS

1971 WEST 12TH AVE., DENVER, CO 80204
(303) 825-0777

CLIENT:
PEPSI COLA COMPANY OF DENVER
3801 BRIGHTON BOULEVARD
DENVER, COLORADO 80216
ATTN: MR. DON PATTON

DATE: 01-10-86 JOB NO. 12167
REPORT NO. 33 SHEET 1 OF 1
SUBJECT PEPSI COLA MANUFACTURING PLANT
3801 BRIGHTON BOULEVARD
SANITARY SEWER TRENCH BACKFILL

TEST NO.	LOCATION	DEPTH FEET *	TEST TYPE	LABORATORY		FIELD			SOIL TYPE
				MAX DENSITY PCF **	OMC %	DRY DENSITY PCF	MC %	COM-PACTION %	
89	90' W. OF MH. #2								CLAY V. SANDY
		1.5	NUC	119	12.5	116	10.7	97	
90	20' E. OF MH. #1								''
		1.5	NUC	119	12.5	114	11.9	96	
91	60' E. OF MH. #1								''
		0.0	NUC	119	12.5	120	11.1	100	
92	45' W. OF MH. #2								''
		0.0	NUC	119	12.5	115	11.2	97	
*	BELOW GRADE								
**	ESTIMATED BY A ONE-POINT PROCTOR.								

SPECIFICATIONS: 95 % OF MAXIMUM ASTM D-698
MOISTURE WITHIN ± 2 % OF OPTIMUM

TYPE OF COMPACTION EQUIPMENT AND NO. OF UNITS:

1) WALK BEHIND VIBRATORY SHEEPSFOOT ROLLER

MOISTURE ADDED BY NATURAL

THICKNESS OF LIFT 10-12 INCHES

TYPE OF EARTH MOVING EQUIPMENT AND NO. OF UNITS:

1)LOADER

THIS REPORT PRESENTS OPINIONS FORMED AS A RESULT OF OUR OBSERVATION OF FILL PLACEMENT, AS WELL AS THE TESTS SHOWN ABOVE. WE HAVE RELIED UPON THE CONTRACTOR TO APPLY THE NECESSARY COMPACTIVE EFFORT AND MOISTURE TO ACHIEVE SPECIFIED COMPACTION DURING TIMES WHEN OUR OBSERVER IS NOT PRESENT, AND AT LOCATIONS OTHER THAN THOSE TESTED. TEST DATA ARE NOT THE SOLE BASIS FOR OPINIONS ON WHETHER THE FILL MEETS SPECIFICATIONS.

PROGRESS REPORT AT THE TIME OF OUR SITE VISITS THE CONTRACTOR WAS PLACING AND COMPACTING ON SITE FILL MATERIAL IN THE SANITARY SEWER TRENCH. THE ABOVE DENSITY TESTS WERE PERFORMED THROUGHOUT THE DAY.

☒ IN OUR OPINION, FILL COMPACTION MEETS SPECIFICATIONS AS INDICATED BY OUR OBSERVATIONS AND TEST NO.(S) 89-92

☐ IN OUR OPINION, FILL COMPACTION DOES NOT MEET SPECIFICATIONS AS INDICATED BY OUR OBSERVATIONS AND TEST NO.(S) _____

AND SHOULD BE REWORKED

SCOPE OF OBSERVATION: ☐ FULL TIME; ☒ PERIODIC, ON CALL BASIS; ☒ CONTRACTOR'S OR CLIENT'S REPRESENTATIVE ADVISED MARK (ACME EXCAVATING)

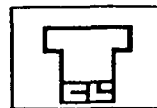
KIRK STEADMAN

FIELD REPRESENTATIVE
KS:RS

CTL/THOMPSON, INC.

APPROVED BY

RONALD M. MC OMBER P.E.



CTL/THOMPSON, INC.
CONSULTING GEOTECHNICAL
AND MATERIALS ENGINEERS

1971 WEST 12TH AVE., DENVER, CO 80204
(303) 825-0777

CLIENT:
PEPSI COLA COMPANY OF DENVER
3801 BRIGHTON BOULEVARD
DENVER, COLORADO 80216
ATTN: MR. DON PATTON

DATE: 01-13-86 JOB NO. 12167
REPORT NO. 34 SHEET 1 OF 1
SUBJECT PEPSI COLA MANUFACTURING FACILITY
3801 BRIGHTON BOULEVARD
SANITARY SEWER TRENCH BACKFILL

TEST NO.	LOCATION	DEPTH FEET *	TEST TYPE	LABORATORY		FIELD			SOIL TYPE
				MAX DENSITY PCF **	OMC %	DRY DENSITY PCF	MC %	COM-PACTION %	
93	100' S. OF 1ST MANHOLE N. OF NEW BUILDING	3.5	NUC	119	12.5	115	10.7	97	CLAY V. SANDY
94	80' S. OF 1ST MANHOLE N. OF NEW BUILDING	2.5	NUC	119	12.5	114	10.5	96	" "
* **	BELOW GRADE ESTIMATED BY A ONE-POINT								

SPECIFICATIONS: 95 % OF MAXIMUM ASTM D-698
MOISTURE WITHIN +2 % OF OPTIMUM

TYPE OF COMPACTION EQUIPMENT AND NO. OF UNITS:

1) WALK BEHIND SHEEPSFOOT ROLLER

MOISTURE ADDED BY NATURAL

THICKNESS OF LIFT 8-10 INCHES

TYPE OF EARTH MOVING EQUIPMENT AND NO. OF UNITS:

1.)LOADER

THIS REPORT PRESENTS OPINIONS FORMED AS A RESULT OF OUR OBSERVATION OF FILL PLACEMENT, AS WELL AS THE TESTS SHOWN ABOVE. WE HAVE RELIED UPON THE CONTRACTOR TO APPLY THE NECESSARY COMPACTIVE EFFORT AND MOISTURE TO ACHIEVE SPECIFIED COMPACTION DURING TIMES WHEN OUR OBSERVER IS NOT PRESENT, AND AT LOCATIONS OTHER THAN THOSE TESTED. TEST DATA ARE NOT THE SOLE BASIS FOR OPINIONS ON WHETHER THE FILL MEETS SPECIFICATIONS.

PROGRESS REPORT. AS REQUESTED BY RON CARPENTER WITH REID BURTON CONSTRUCTION. A SITE VISITS WERE MADE TO PERFORM DENSITY TESTS ON SANITARY SEWER TRENCH BACKFILL. THE ABOVE DENSITY TESTS WERE PERFORMED THROUGHOUT THE DAY. THE CONTRACTOR INFORMED OUR FIELD REPRESENTATIVE ADDITIONAL TESTS WOULD BE NEEDED TOMORROW MORNING.

☒ IN OUR OPINION, FILL COMPACTION MEETS SPECIFICATIONS AS INDICATED BY OUR OBSERVATIONS AND TEST NO.(S) 93, 94

1 IN OUR OPINION, FILL COMPACTION DOES NOT MEET SPECIFICATIONS AS INDICATED BY OUR OBSERVATIONS AND TEST NO.(S)

AND SHOULD BE REWORKED

SCOPE OF OBSERVATION: ☐ FULL TIME; ☒ PERIODIC, ON CALL BASIS; ☒ CONTRACTOR'S OR CLIENT'S REPRESENTATIVE ADVISED MARK (ACME SEWER)

KIRK STEADMAN

FIELD REPRESENTATIVE
KS:RS

CTL/THOMPSON, INC.

APPROVED BY
RONALD M. MC OMBER P.E.

Compaction Test Report



CTL/THOMPSON, INC.
CONSULTING GEOTECHNICAL
AND MATERIALS ENGINEERS

1971 WEST 12TH AVE., DENVER, CO 80204
(303) 825-0777

CLIENT:
PEPSI COLA COMPANY OF DENVER
3801 BRIGHTON BOULEVARD
DENVER, COLORADO 80216
ATTN: MR. DON PATTON

DATE: 01-14-86 JOB NO. 12167
REPORT NO. 35 SHEET 1 OF 1
SUBJECT: PEPSI COLA MANUFACTURING FACILITY
3801 BRIGHTON BOULEVARD
SANITARY SEWER TRENCH BACKFILL

TEST NO.	LOCATION	DEPTH FEET *	TEST TYPE	LABORATORY		FIELD			SOIL TYPE
				MAX DENSITY PCF	OMC %	DRY DENSITY PCF	MC %	COMPACTION %	
95	100' S. OF 1ST MANHOLE N. OF SPORT BUILDING	0.5	NUC	122.0	11.3	111	7.6	91	CURVE #3 JOB #11870
96	30' S. OF 1ST MANHOLE N. OF SPORTS BUILDING	3.5	NUC	128.5	9.5	125	6.5	97	CURVE #1
95A	RETEST OF #95		NUC	122.0	11.3	118	8.2	97	CURVE #3 JOB #11870
97	W. SIDE OF 1ST MANHOLE N. OF SPORTS BUILDING	5.0	NUC	122.0	11.3	116	8.8	95	" "
98	40' S. OF 1ST MANHOLE N. OF SPORTS BUILDING	1.5	NUC	122.0	11.3	115	8.6	94	" "
99	E. SIDE OF 1ST MANHOLE N. OF SPORTS BUILDING	3.0	NUC	122.0	11.3	117	9.4	96	" "
100	NORTH SIDE OF MANHOLE #2	4.0	NUC	122.0	11.3	115	8.6	94	" "
*	BELOW GRADE								

SPECIFICATIONS: 95 % OF MAXIMUM ASTM D-1557
MOISTURE WITHIN +3 % OF OPTIMUM

TYPE OF COMPACTION EQUIPMENT AND NO. OF UNITS:

- 1) WALK BEHIND VIBRATORY SHEEPSFOOT ROLLER
1) BACKHOE WITH VIBRATORY PLATE

MOISTURE ADDED BY NATURAL

THICKNESS OF LIFT 10-12 INCHES

TYPE OF EARTH MOVING EQUIPMENT AND NO. OF UNITS:

- 1) BACKHOE

THIS REPORT PRESENTS OPINIONS FORMED AS A RESULT OF OUR OBSERVATION OF FILL PLACEMENT, AS WELL AS THE TESTS SHOWN ABOVE. WE HAVE RELIED UPON THE CONTRACTOR TO APPLY THE NECESSARY COMPACTIVE EFFORT AND MOISTURE TO ACHIEVE SPECIFIED COMPACTION DURING TIMES WHEN OUR OBSERVER IS NOT PRESENT, AND AT LOCATIONS OTHER THAN THOSE TESTED. TEST DATA ARE NOT THE SOLE BASIS FOR OPINIONS ON WHETHER THE FILL MEETS SPECIFICATIONS.

PROGRESS REPORT AS REQUESTED BY THE CONTRACTOR SITE VISITS WERE MADE TODAY TO PERFORM DENSITY TESTS IN THE SANITARY SEWER TRENCH NORTH OF THE SPORTS BUILDING. THE ABOVE DENSITY TESTS WERE PERFORMED THROUGHOUT THE DAY.

☒ IN OUR OPINION, FILL COMPACTION MEETS SPECIFICATIONS AS INDICATED BY OUR OBSERVATIONS AND TEST NO.(S) 96, 95A, 97-100

☐ IN OUR OPINION, FILL COMPACTION DOES NOT MEET SPECIFICATIONS AS INDICATED BY OUR OBSERVATIONS AND TEST NO.(S)

AND SHOULD BE REWORKED

SCOPE OF OBSERVATION: ☐ FULL TIME; ☒ PERIODIC, ON CALL BASIS; ☒ CONTRACTOR'S OR CLIENT'S REPRESENTATIVE ADVISED RON (REID BURTON)

KIRK STEADMAN

FIELD REPRESENTATIVE
KS:RS

CTL/THOMPSON, INC.

APPROVED BY

RONALD M. MC OMBER P.E.

Compaction Test Report



CTL/THOMPSON, INC.
CONSULTING GEOTECHNICAL
AND MATERIALS ENGINEERS

1971 WEST 12TH AVE., DENVER, CO 80204
(303) 825-0777

CLIENT: PEPSI-COLA COMPANY OF DENVER
3801 BRIGHTON BOULEVARD
DENVER, COLORADO 80216

ATTN: MR. DON PATTON

DATE: 1-15-86 JOB NO. 12167
REPORT NO 36 SHEET 1 OF 1
SUBJECT

PEPSI COLA MANUFACTURING FACILITY
3801 BRIGHTON BOULEVARD
SANITARY SEWER TRENCH BACKFILL

TEST NO.	LOCATION	DEPTH FEET	TEST TYPE	LABORATORY		FIELD			SOIL TYPE
				MAX DENSITY PCF	OMC %	DRY DENSITY PCF	MC %	COM-PACTION %	
101	5'S OF MH #3	1.5	NUC	126.5	10.0	122	7.8	96	CURVE #2 JOB #11870
102	3'N OF MH #3	1.5	NUC	126.5	10.0	122	7.8	96	" "
103	3'S OF MH #4	1.5	NUC	122	11.3	117	11.4	96	CURVE #3 JOB #11870
104	4'N OF MH #4	1.5	NUC	122	11.3	118	10.8	97	" "
*	BELOW GRADE								

SPECIFICATIONS: 95 % OF MAXIMUM ASTM D 1557
MOISTURE WITHIN ±3 % OF OPTIMUM
TYPE OF COMPACTION EQUIPMENT AND NO. OF UNITS:

MOISTURE ADDED BY
THICKNESS OF LIFT INCHES
TYPE OF EARTH MOVING EQUIPMENT AND NO. OF UNITS:

—(1) BACKHOE, (1) FRONT END LOADER

THIS REPORT PRESENTS OPINIONS FORMED AS A RESULT OF OUR OBSERVATION OF FILL PLACEMENT, AS WELL AS THE TESTS SHOWN ABOVE. WE HAVE RELIED UPON THE CONTRACTOR TO APPLY THE NECESSARY COMPACTIVE EFFORT AND MOISTURE TO ACHIEVE SPECIFIED COMPACTION DURING TIMES WHEN OUR OBSERVER IS NOT PRESENT, AND AT LOCATIONS OTHER THAN THOSE TESTED. TEST DATA ARE NOT THE SOLE BASIS FOR OPINIONS ON WHETHER THE FILL MEETS SPECIFICATIONS.

PROGRESS REPORT AS REQUESTED BY THE CONTRACTOR, A SITE VISIT WAS MADE TO PERFORM COMPACTION TESTS ON THE BACKFILL AROUND THE MANHOLES FOR THE SANITARY SEWER LINE. COMPACTION AT THE ABOVE TEST LOCATIONS WAS COMPLETED PRIOR TO OUR VISIT.

[X] IN OUR OPINION, FILL COMPACTION MEETS SPECIFICATIONS AS INDICATED BY OUR OBSERVATIONS AND TEST NO.(S) 101-104.
[] IN OUR OPINION, FILL COMPACTION DOES NOT MEET SPECIFICATIONS AS INDICATED BY OUR OBSERVATIONS AND TEST NO.(S)

AND SHOULD BE REWORKED

SCOPE OF OBSERVATION: [] FULL TIME; [X] PERIODIC, ON CALL BASIS; [X] CONTRACTOR'S OR CLIENT'S REPRESENTATIVE ADVISED RON/REID BURTON

CTL/THOMPSON, INC.

KIRK D. SKINNER

FIELD REPRESENTATIVE

APPROVED BY

RONALD M. MC OMBER, P.E.

KS:PV



CTL/THOMPSON, INC.
CONSULTING GEOTECHNICAL
AND MATERIALS ENGINEERS

1971 WEST 12TH AVE., DENVER, CO 80204
(303) 825-0777

CLIENT:

PEPSI-COLA COMPANY OF DENVER
3801 BRIGHTON BOULEVARD
DENVER, COLORADO 80216

ATTN: MR. DON PATTON

DATE: 1-16-86

JOB. NO. **12167**

REPORT NO

37 SHEET 1 OF 1

SUBJECT

PEPSI-COLA MANUFACTURING FACILITY
3801 BRIGHTON BOULEVARD
STORM DRAIN INLET BACKFILL

TEST NO.	LOCATION	DEPTH FEET *	TEST TYPE	LABORATORY		FIELD			SOIL TYPE
				MAX DENSITY PCF	OMC %	DRY DENSITY PCF	MC %	COM-PACTION %	
105	3'W OF INLET	6.0	NUC	122	11.3	117	11.0	96	CURVE #3 JOB #11870
106	12'W OF INLET	6.0	NUC	122	11.3	119	10.3	98	" "
*	BELOW GRADE								

SPECIFICATIONS: 95 % OF MAXIMUM ASTM D 1557

MOISTURE WITHIN + 3 % OF OPTIMUM

TYPE OF COMPACTION EQUIPMENT AND NO. OF UNITS:

(1) SMALL STEEL DRUM ROLLER

MOISTURE ADDED BY _____

THICKNESS OF LIFT **10-20** INCHES

TYPE OF EARTH MOVING EQUIPMENT AND NO. OF UNITS:

(1) BACKHOE

THIS REPORT PRESENTS OPINIONS FORMED AS A RESULT OF OUR OBSERVATION OF FILL PLACEMENT, AS WELL AS THE TESTS SHOWN ABOVE. WE HAVE RELIED UPON THE CONTRACTOR TO APPLY THE NECESSARY COMPACTIVE EFFORT AND MOISTURE TO ACHIEVE SPECIFIED COMPACTION DURING TIMES WHEN OUR OBSERVER IS NOT PRESENT, AND AT LOCATIONS OTHER THAN THOSE TESTED. TEST DATA ARE NOT THE SOLE BASIS FOR OPINIONS ON WHETHER THE FILL MEETS SPECIFICATIONS.

PROGRESS REPORT AS REQUESTED BY RON, WITH REID BURTON CONSTRUCTION THE SITE WAS
VISITED TO PERFORM COMPACTION TESTS ON BACKFILL OF THE STORM DRAIN INLET 30 FEET
NORTH EAST OF MANHOLE #4. THE CONTRACTOR IS REMOVING LARGE CONCRETE BLOCKS FROM
THE TENNIS COURT AREA PRIOR TO PLACING FILL.

☒ IN OUR OPINION, FILL COMPACTION MEETS SPECIFICATIONS AS INDICATED BY OUR OBSERVATIONS AND TEST NO.(S) 105-106

IN OUR OPINION, FILL COMPACTION DOES NOT MEET SPECIFICATIONS AS INDICATED BY OUR OBSERVATIONS AND TEST NO.(S)

AND SHOULD BE REWORKED

SCOPE OF OBSERVATION: ☐ FULL TIME; ☒ PERIODIC, ON CALL BASIS: ☒ CONTRACTOR'S OR CLIENT'S REPRESENTATIVE ADVISED RON/REID BURTON

CTL/THOMPSON, INC.

KIRK D. SKINNER
FIELD REPRESENTATIVE

APPROVED BY

RONALD M. MC OMBER, P.E.

KS:PV



CTL/THOMPSON, INC.
CONSULTING GEOTECHNICAL
AND MATERIALS ENGINEERS

1971 WEST 12TH AVE., DENVER, CO 80204
(303) 825-0777

CLIENT:

DATE 3-19-86 JOB NO. 12167

REPORT NO. 38 SHEET 1 OF 1

SUBJECT

PEPSI-COLA COMPANY OF DENVER
3801 BRIGHTON BOULEVARD
DENVER, COLORADO 80216
ATTN: MR. DON PATTON

PEPSI SPORTS COMPLEX
3801 BRIGHTON BOULEVARD
UTILITY TRENCH BACKFILL

TEST NO.	LOCATION	DEPTH FEET *	TEST TYPE	LABORATORY		FIELD			SOIL TYPE
				MAX DENSITY PCF	OMC %	DRY DENSITY PCF	MC %	COM-PACTION %	
107	TRASH COMPACTOR DRAIN LINE 40'W OF INLET	2.5	NUC	126.5	10.0	122	6.6	96	CURVE #2 JOB #11870
108	TRASH COMPACTOR DRAIN LINE 10'W OF INLET	0.0	NUC	126.5	10.0	121	6.4	95	" "
109	TRASH COMPACTOR DRAIN LINE 70'W OF INLET	0.0	NUC	126.5	10.0	122	6.8	96	" "
	*BELOW GRADE								

SPECIFICATIONS: 95 % OF MAXIMUM ASTM D 1557

MOISTURE WITHIN ± 3 % OF OPTIMUM

TYPE OF COMPACTION EQUIPMENT AND NO. OF UNITS:

(1) VIBRATORY SLED

MOISTURE ADDED BY NATURAL

THICKNESS OF LIFT 10-12 INCHES

TYPE OF EARTH MOVING EQUIPMENT AND NO. OF UNITS:

(1) BACKHOE

THIS REPORT PRESENTS OPINIONS FORMED AS A RESULT OF OUR OBSERVATION OF FILL PLACEMENT, AS WELL AS THE TESTS SHOWN ABOVE. WE HAVE RELIED UPON THE CONTRACTOR TO APPLY THE NECESSARY COMPACTIVE EFFORT AND MOISTURE TO ACHIEVE SPECIFIED COMPACTION DURING TIMES WHEN OUR OBSERVER IS NOT PRESENT, AND AT LOCATIONS OTHER THAN THOSE TESTED. TEST DATA ARE NOT THE SOLE BASIS FOR OPINIONS ON WHETHER THE FILL MEETS SPECIFICATIONS.

PROGRESS REPORT AS REQUESTED BY RON CARPENTER WITH REID BURTON CONSTRUCTION, SITE

VISITS WERE MADE TO PERFORM DENSITY TESTS ON BACKFILL OVER THE TRASH COMPACTOR DRAIN LINE.

☒ IN OUR OPINION, FILL COMPACTION MEETS SPECIFICATIONS AS INDICATED BY OUR OBSERVATIONS AND TEST NO.(S) 107-109

! IN OUR OPINION, FILL COMPACTION DOES NOT MEET SPECIFICATIONS AS INDICATED BY OUR OBSERVATIONS AND TEST NO.(S)

AND SHOULD BE REWORKED

SCOPE OF OBSERVATION: FULL TIME: ☒ PERIODIC, ON CALL BASIS: ☒ CONTRACTOR'S OR CLIENT'S REPRESENTATIVE ADVISED RON (REID BURTON)

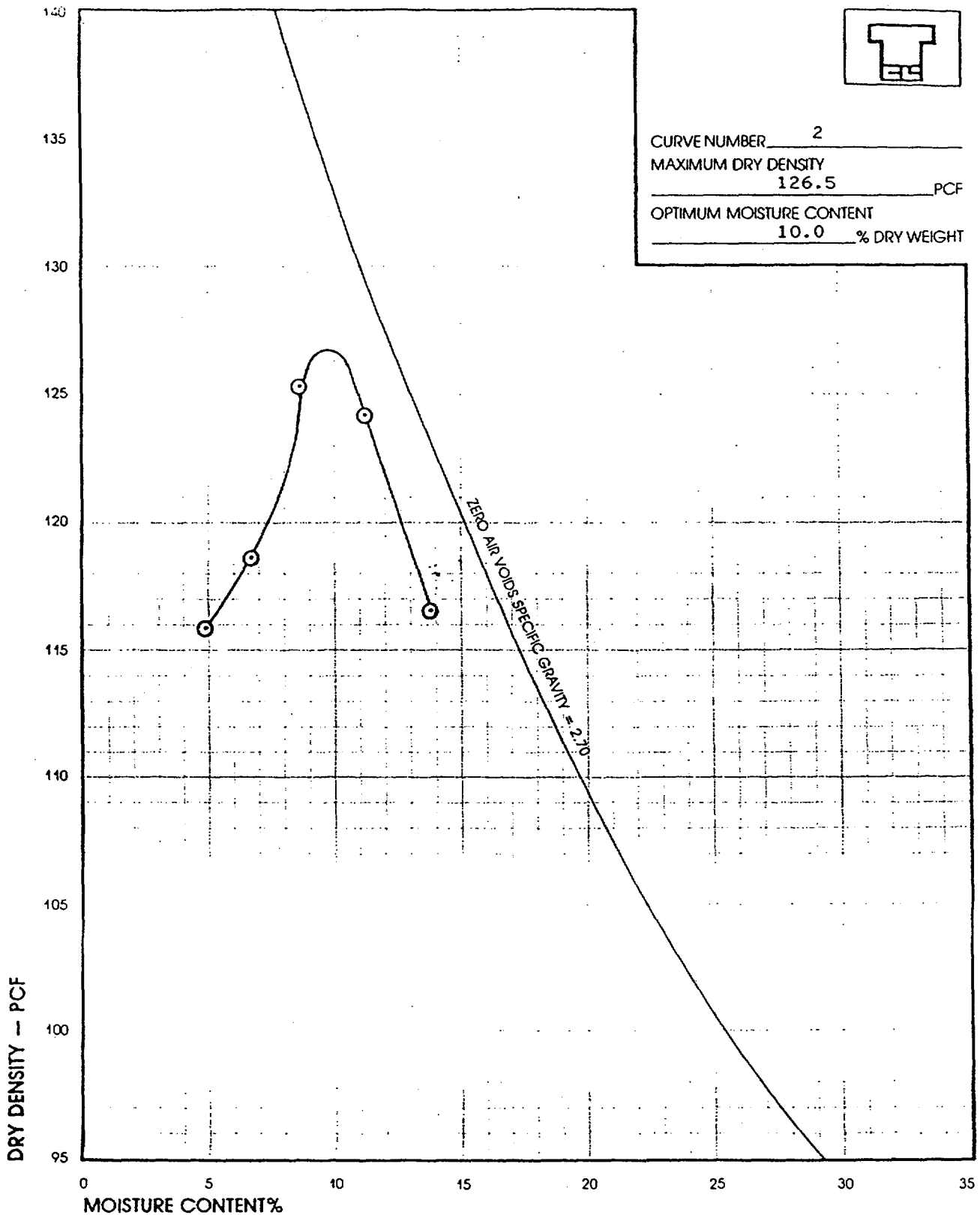
CTL THOMPSON, INC.

KIRK STEADMAN
FIELD REPRESENTATIVE

[illegible]

RONALD M. MC OMBER, P. E.

KS : DM



Sample Description SAND, SILTY, GRAVELLY, BROWN

Location PEPSI PLANT - ATHLETIC CENTER
ON SITE MATERIALS

Compaction Test Procedure ASTM D 1557-78
METHOD 'C'

LIQUID LIMIT _____ %
 PLASTICITY INDEX _____ %
 GRAVEL _____ %
 SAND _____ %
 SILT AND CLAY _____ %

Compaction Test Results

TARGET SHEET
EPA REGION VIII
SUPERFUND DOCUMENT MANAGEMENT SYSTEM

DOCUMENT NUMBER: 490478

SITE NAME: LINCOLN PARK

DOCUMENT DATE: 10-AUG-01

DOCUMENT NOT SCANNED

Due to one of the following categories:

- ☐ PHOTOGRAPHS
- ☐ 3 - DIMENSIONAL
- ☒ X OVERSIZED
- ☐ AUDIO/ VISUAL
- ☐ PERMANENTLY BOUND DOCUMENTS
- ☐ POOR LEGIBILITY
- ☐ OTHER
- ☐ NOT AVAILABLE
- ☐ TYPES OF DOCUMENTS NOT TO BE SCANNED
(Data Packages, Data Validation, Sampling Data, CBI, Chain of Custody)

ARCHITECTURAL DRAWINGS -
MECHANICAL LEGEND - DATED MAY 9, 1986
GENERAL NOTES, SCHEDULES, AND TYPICAL
SLAB DETAILS - NO DATE RECORDED